

**The Atkins Diet and the Internet:
Exploring Lay Challenges to Contested Medical Expertise**

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Abstract

This thesis is a qualitative textual analysis of Internet discourses regarding the Atkins diet. It examines supporting and opposing health claims about the diet and how self-governing dieters utilize Internet message boards to negotiate competing claims and engage with medical expertise and experiential lay knowledge. An extensive exploration of sociological literature on risk, governmentality, health and the Internet develops an overview of the changing relationship between expertise and lay knowledge, which provides a theoretical framework for examining the impact of the Internet on the status of dominant medical expertise. By allowing for a less narrow conceptualisation of both expertise and lay knowledge, this thesis explores the possibility of hybrid and emergent forms of knowledge and examines how lay dieters engage and challenge dominant medical notions about health and well-being.

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Introduction

If an expert says it can't be done, get another expert – David Ben-Gurion

This thesis will explore the changing relationship between expertise and lay knowledge by examining the role of the Internet as an educational tool for self-governing dieters following controversial diets and what impact the Internet has on relations of expertise and lay knowledge. A recent report from the World Health Organization [WHO] (2000), entitled “Obesity: Preventing and Managing the Global Epidemic”, expresses the medical community’s widespread agreement over the risks of obesity and establishes weight reduction as a form of preventive medicine. The risks of obesity and the benefits of safe, intentional preventive weight loss are widely acknowledged in medical discourses; however, contestation occurs over the ‘safety’ of various weight loss programs. The Atkins diet (1999-2004) is the most recognized example of controversial diets in contemporary western society. Although the Atkins diet was created more than thirty years ago by Dr. Robert Atkins, it has experienced a recent resurgence of popularity when several studies emerged in the medical community, claiming the diet as both safe and effective. In a time where obesity is a major concern for the global medical community, understanding how individuals engage with expert and lay knowledges about controversial diets is a valuable undertaking. Despite intense disagreement in the medical community about the healthiness and safety of the Atkins diet, many people still choose this diet for combating their weight problem. By exploring competing claims in web based discourses and how self-governing dieters engage with and challenge professional expertise, I hope to gain a better understanding of what role the Internet plays in changing relations of expertise and lay knowledge.

One of the most important areas for debate in medical sociology concerns the doctor-patient relationship, which provides an excellent example of the interaction between expertise and lay knowledge. Accessing health information through the Internet is one trend having a great impact on this relationship (Hardey 1999, Nettleton 2004, Carlile and Sefton 1998, Winker et al. 2000). Internet users can now self-diagnose simple medical conditions, educate themselves on alternative medicine, personalize diet and exercise programs and log on to find surgical wait times in their region. Although the Internet provides great potential for the accessibility of health information, medical communities are hesitant to fully embrace the concept of electronic health (e-health). Because Internet users are interacting with others and educating themselves outside the traditional boundaries of the doctor-patient relationship, there is less mediation of knowledge; meaning, physician expertise is not necessarily held to a privileged position. Multiple sites of knowledge, created by professional experts and experienced lay individuals, are available for equitable consumption online. This lack of standardized regulation of quality is a large barrier to medical organizations fully accepting Internet resources as valid and reliable sources of health information. Although medical organizations, including the American Medical Association, are currently developing guidelines to evaluate the quality of web based health information (Winker et al. 2000), part of what is appealing about online health information is the availability of competing health claims.

This situation makes web based resources an ideal object of analysis for investigating contested medical knowledge about the controversial Atkins Nutritionals (1999-2004) program. More specifically, Internet message boards provide opportunities for Internet users with various kinds of expertise to discuss aspects of the program at a distance from

traditional doctor-patient relations. Therefore, my primary research question asks: How do message board users negotiate competing claims in order to govern divergent potential and actual risks associated with the Atkins Nutritionals (1999-2004) program. Through this investigation, I will also examine how new forms of knowledge are constituted and how these fit into the debate over expert-lay knowledge. In other words, what new forms of authority and knowledge emerge in this context? In short, I see this project as an analysis of the web based risk politics regarding controversial weight loss techniques. I also seek to challenge the notion that health and well-being are homogenous definitions with precise 'right' answers and no room for choice, as well as the notion that patients are wholly dependent upon the expertise of the physicians who treat them.

Through my work, I connect topics on governance, risk, knowledge and health promotion, as they all impact the changing nature of expert-lay relationships. There are three main bodies of literature to draw upon. The first concerns sociological literature on the divide between expert and lay knowledge. As I am primarily concerned with deconstructing traditional views on what constitutes both expert and lay knowledge, I will engage with this literature extensively throughout the thesis. The second body of literature involves pieces focusing on governmentality, risk and neo-liberalism. This literature provides the context for my theoretical framework. Lastly, I will be looking at how the medical community conceptualizes the doctor-patient relationship and examining sociological literature on how electronic health impacts the boundaries of this same relationship. Both bodies of literature are useful in several chapters, both theoretical and analytic.

The thesis is divided into three sections. The first chapter looks briefly at the global problem of obesity and weight reduction and outlines the basics of the Atkins diet (1999-

2004). More importantly, the main focus of this chapter involves an extensive review of the literature discussed above. By examining how conceptions of expertise, lay knowledge and hybrid forms of knowledge have evolved in the sociological literature, how basic tenets of neo-liberalism impact changing relations of knowledge, and what role the Internet might play in these relations, I conclude the chapter by allowing for the emergence of forms of expertise based on experience as opposed to credentials or formal training. This theoretical argument figures prominently in later chapters.

The second chapter provides a comprehensive description of the Atkins Nutritionals Program (1999-2004) and highlights the major concerns about the diet. More specifically, I examine the major medical objections to this diet, which include questions about the health, safety and effectiveness of the diet. By examining a variety of websites opposing and supporting the Atkins diet, this chapter provides an exploration of competing claims regarding the Atkins diet. The latter part of the chapter investigates how these websites construct authority, expertise and legitimacy for their claims and how they address one another. In short, this chapter gives a broad picture of what resources self-governing dieters are likely to encounter online, how expertise is portrayed and how competition plays out.

The third and final chapter explores the primary research question of how message-board users negotiate competing claims and govern their Atkins diet experience. Important issues and themes are highlighted and the role of the Internet in relations of expertise is discussed. By examining how Atkins dieters challenge dominant notions of medical expertise, I conclude the chapter by recognizing the importance and potential of the Internet in doctor-patient relationships. The fourth section of the thesis provides concluding thoughts and a methods appendix.

This project is important in several respects. Neo-liberal models suggest that maintenance of health and well-being is increasingly delegated to the responsibility of the self-governing individual, while weight reduction is becoming viewed as a form of preventive medicine and is experiencing an intensified regulation within the global medical community and lay populations. This combination establishes a norm for increased governance of health and weight loss by responsible lay individuals. More importantly, the prevalence of competing claims available in web-based discourses, along with the existence of personal physicians who may not support one's chosen weight loss program, necessitates a situation in which self-governing laypersons must inform themselves directly in order to take on responsibility for their own health and well-being. Understanding how self-governing individuals assume responsibility for their health by educating themselves with online materials addresses an area often neglected in literature on expertise and lay knowledge. By exploring how the Internet allows users to form communities that may challenge traditional notions of health and nutrition, we can begin to understand how this relatively new phenomenon impacts medical dominance of expertise. In other words, this project seeks to push traditional views on expertise and lay knowledge and develop concepts of expertise that emerge outside the traditional boundaries of expert-lay relations. By answering my primary and secondary research questions, I aim to both contribute to the sociological literature and to further examine the current and potential importance of electronic health.

Chapter One

'An Exploration of Sociological and Medical Literature'

Obesity and Weight Reduction

A recent report from the World Health Organization [WHO] (2000) discusses preventive and management oriented strategies for dealing with the 'global epidemic' of obesity. In this document, the WHO explicitly contends that obesity should be treated as a disease in and of itself: "Obesity can be defined simply as the disease in which excess body fat has accumulated to such an extent that health may be adversely affected" (WHO 2000:6). Obesity is typically determined by a measurement known as Body Mass Index [BMI], which is a simple index of weight-for-height. According to this report, "a BMI of 30 or more is now widely accepted as denoting obesity" (WHO 2000:8). However, BMI, as a measurement of obesity, is problematic in some respects. While inconsistent employment and inability to explore individual aspects of obesity are considered to be weaknesses of this measure, it is the most dominant method in determining at-risk individuals and populations with regard to obesity.

While the WHO clearly expresses its conception of obesity as a disease, the majority of the report is more concerned with obesity as a key risk factor for other noncommunicable diseases¹ such as: cardiovascular disease², non-insulin-dependent diabetes mellitus³ and coronary heart disease⁴ (WHO 2000:39). However, the relationship between obesity and these diseases is also influenced by other factors such as: distribution of weight, duration of

¹ Noncommunicable diseases are diseases that are "not transmissible by direct contact" (Medline Plus® 2003)

² Hereafter referred to as CVD

³ Hereafter referred to as NIDDM

⁴ Hereafter referred to as CHD

the condition and the presence of comorbidities (i.e. smoking cigarettes) (WHO 2000:39-40, 44). In addition to the physiological risks associated with obesity, the WHO report also discusses risks for 'psychosocial' problems⁵, such as: stigma, poor body image and eating disorders (WHO 2000:55-58).

The WHO also admits that there are few long-term studies on the effects of intentional weight loss; however, it does conclude:

intentional weight loss results in marked improvements in NIDDM, dyslipidaemia, hypertension, cardiovascular risk and ovarian function. There are also improvements in breathlessness, sleep quality, sleep apnoea, back and joint pain and osteoarthritis (WHO 2000:69).

While there are few objections to the reported benefits of weight reduction, there are some risks involved, specifically in cases where rapid or unintentional weight loss occurs. These hazards include increased risk for gallbladder disease and reduced bone density. Both risks are higher for women. The WHO report also brings elements of culture into its analysis by noting, "that, in societies in which overweight and obesity are seen as a sign of affluence, weight loss may be interpreted as an indication of financial disaster" (WHO 2000:72). Ultimately, the risks of obesity and the benefits of safe, intentional weight reduction are widely acknowledged in both medical and non-medical fields.

Since weight reduction reduces the risk factors associated with obesity, it can be seen as a technique of governance through risk management. While obesity is considered a disease in its own right (WHO 2000), its symptoms are not treated in the present. The only treatment for obesity, weight reduction⁶, is an attempt at reducing future oriented risks and is thus a means for governing the future through risk management; it is therefore a form of preventive

⁵ It should be noted that these problems are seen as culturally variant and discussed in terms of contemporary western society

⁶ Achieved by surgical or natural methods, such as dieting or maintaining a weight loss program.

medicine. As several sociological theorists maintain, risk as a technology of governing is prevalent in contemporary neo-liberal society, particularly in terms of health (O'Malley 1996, Rose 1998, Greco 1993, Ruhl 1999, Valverde 1998).

Although the medical community maintains widespread agreement about the benefits of weight loss in the reduction of obesity related risk factors, there is disagreement and controversy over the safety of various weight loss programs. The most popular of these programs, in recent years, is the Atkins diet (1999-2004) and other similar high protein / low carbohydrate diets⁷. Although, the diet was first published in 1972, this low carb diet has recently regained substantial popularity and its safety is hotly debated within the global medical community. The diet has been criticized in pop-culture for going against common-sense perceptions about what is healthy. More specifically, lay discourses on the Atkins diet cover a wide range of criticisms, suggesting that it is merely a fad diet that will burn out in popularity and that the diet only works because by restricting an extensive amount of food choices, it inherently restricts calories like any other diet on the market (Atkins Nutritionals 1999-2004a). Others maintain that the recent resurgence of the low carb diet is simply a marketing ploy and that the onslaught of low carb products flooding the market are just low calorie products with redesigned packages that appeal to a new generation of low carb dieters (Chianello 2004).

Opponents in the medical community dispute the diet's effectiveness at reducing the risks of obesity, despite its effectiveness at actual weight reduction. Dr. Dean Ornish (2004) suggests that by limiting carbohydrates and emphasizing high protein consumption, the Atkins diet does not contain enough risk reducing substances such as phytochemicals, bioflavonoids and the more well known, dietary fiber (Ornish 2004:538). As he states, in lay

⁷ Hereafter referred to as 'low carb diets'.

terms: “an Atkins diet is high in disease-promoting substances and low in protective ones – a double whammy” (Ornish 2004:538). Dr. Atkins himself has maintained that his diet has a host of benefits, including its ability to reduce coronary heart disease (Ornish 2004:538). However, as Ornish points out, Dr. Atkins has never published any peer-reviewed data to support these assertions (2004:539). Others maintain that any risk reduction achieved through the Atkins diet is solely attributed to the actual reduction of weight, as opposed to the healthfulness of the consumed foods. Weight Watchers, a competing weight loss organization, suggests that all risks associated with obesity can be reduced by a modest loss of body fat (approximately 5-10% of one’s starting weight) (Weight Watchers 2004). As has been suggested before, few medical experts dispute the effectiveness of the diet. The disagreement and controversy surrounds these perceptions of what is healthy and how the risks balance out. Uncertainty is also an issue. No long term, peer reviewed studies exist on the risks and benefits of the Atkins diet. One study that establishes the effectiveness of the diet over a six month period also recognizes its limitations and recommends further research:

limitations of this study include the uncontrolled design, self-report of several variables, and the use of skin-fold calipers to estimate fat mass [Clasey 1999]. Because only healthy volunteers were used, caution should be used when generalizing these results to patients with medical illnesses...In summary, this study describes the metabolic changes associated with a very low carbohydrate diet program when used for weight loss during a 6-month period. Further controlled research is needed to determine estimate the risks and benefits of this diet in healthy persons and in patients with other medical conditions (Westman et al. 2002:35).

Ironically, this study, and others with similar conclusions, are used by both Atkins supporters and opponents to validate their position. At this point in time, where no long-term definitive studies have established a unified medical position on the safety of the Atkins diet, a situation

exists where perceptions of healthiness and preference of scientific opinion determine course of action and how one manages risk as a self-governing dieter.

It is clear that conflict and competition are prevalent in medical discussions concerning the Atkins diet and that risk is central to expert and lay discourses surrounding both the condition of obesity and the preventive process of losing weight through these low carbohydrate diets. Before exploring and empirically analyzing these complex discourses, it is essential to examine the changing nature of expert and lay knowledges and their relationship to each other.

Electronic sources regarding health and risk represent one site of knowledge that is impacting the changing relations of expert and lay knowledge. This makes web based resources an ideal object of analysis for investigating contested medical knowledge about the controversial Atkins Nutritionals (1999-2004) program. More specifically, web message boards are a space⁸ where lay people and ‘experts’ can discuss aspects of the program at a distance from traditional expert-lay relations. To understand this complex set of discourses regarding risk and controversial weight loss techniques, I turn to my primary research question and ask: How do Internet message board users negotiate competing claims in order best to govern divergent and potential risks associated with the Atkins Nutritional (1999-2004) program?

Because the doctor-patient relationship, and relations of medical expertise generally, are an excellent example of the expert-layperson relationship, exploring the context and changing relationship between expertise and lay knowledge provides an important framework for examining how self-governing dieters navigate contested medical knowledge

⁸ It should be noted that there is an ongoing debate over terming the Internet as ‘space’; however, it is irrelevant at this point of discussion.

regarding the Atkins diet within and outside the confines of the doctor-patient relationship. Mainly, by examining the emergence of hybrid forms of knowledge and how the concept of responsibility in the context of neo-liberalism factors into health risk management, I hope to achieve an understanding of how authority and legitimacy are constructed in lay Internet discourses and ultimately how challenges to expertise are manifested in this context.

Risk and the Expert-Lay Divide

Both Anthony Giddens (1991) and Ulrich Beck (1992) conceptualize expertise as a characteristic of late modernity. According to Giddens (1991), “expert systems bracket time and space through deploying modes of technical knowledge which have validity independent of the practitioners and clients who make use of them” (1991:18). The existence of expertise systems is dependent on trust and “trust presumes a leap of commitment, a quality of ‘faith’ which is irreducible” (Giddens 1991:19). Because various competing expertise systems exist, individuals place their trust in a particular system based on the perceived credibility of the specific expert system. However, “high modernity is characterized by widespread skepticism about providential reason, coupled with the recognition that science and technology are double edged, creating new parameters of risk and danger as well as offering beneficial possibilities for human kind” (Giddens 1991:27-28). Giddens (1991) defines provincial reason as “the idea that increased secular understanding of the nature of things intrinsically leads to a safer and more rewarding existence for human beings” (1991:28) and suggests that it “carries residues of conceptions of fate deriving from pre-modern eras” (1991:28). As Giddens agrees with Beck’s conception of modernity as a risk society (1991:28), he maintains that while pre-modern notions of fate still exist, risk has become the dominant way

of thinking. In other words, “to accept risk as risk, an orientation which is more or less forced on us by the abstract systems of modernity, is to acknowledge that no aspects of our activities follow a predestined course, and all are open to contingent happenings” (1991:28). Thus, by embracing modern risk thinking, skepticism over provincial reason becomes pervasive. The individual is then assessing risk by placing trust in any expert system due to the confusion and incoherence characteristic of late modern society. This confusion and incoherence is made evident in his work, because for Giddens “modernity is essentially a post-traditional order. The transformation of time and space, coupled with the disembedding mechanisms, propel social life away from the hold of pre-established precepts or practices” (Cassell 1993:293). The recognition of this risk forms the basis for Giddens’ idea of ontological insecurity. He also sees trust and security as intertwined in certain respects: “a sense of the reliability of persons and things, so central to the notion of trust, is basic to feelings of ontological security; hence the two are psychologically closely related” (Giddens 1990:92).

Expertise systems, and consequently the competition between them, are also central in the monitoring of health:

the regular and detailed monitoring of health risks, in relation to information such as that just described, [disagreement of causes of cancer] provides an excellent example, not just of routine reflexivity in relation to extrinsic risk, but of the interaction between expert systems and lay behaviour in relation to risk. Medical specialists and other researchers produce the materials from which risk profiling is carried out. Yet risk profiles do not remain the special preserve of the experts. The general population is aware of them, even if it is often only in a rough and ready way, and indeed the medical profession and other agencies are concerned to make their findings widely available to lay people. (Giddens 1991:120)

According to Giddens, it is the experts who educate the public, furthering the idea of lay dependence on expertise. However, as he goes on to state: “at any one time, there is

substantial, sometimes radical, disagreement within the medical profession about risk factors as well as about the aetiology of major health hazards". For Giddens (1990, 1991), the individual layperson is not in a position to interpret potentially conflicted results of expert research studies and must depend on other authoritative expertise systems for interpretation. He further suggests that: "the more specialisms becomes concentrated, the smaller the field in which any given individual can claim expertise; in other areas of life she or he will be in the same situation as everyone else" (1991:124). Thus, while expertise can be claimed in a small area of life, experts in one area remain lay individuals in most others. As Cassell (1993) summates: "there is no requirement of trust when a technical system is more or less completely known to a particular individual. In respect of expert systems, trust brackets the limited technical knowledge which most people possess about coded information which routinely affects their lives" (1993:293). The dependency model emphasized by Giddens (1990, 1991) leaves little room for emergent forms of lay expertise or other more complex relations of knowledge.

What is implied by Giddens (1990) in his discussion of ontological insecurity is explicated by Beck:

herein lies the essential and momentous consequence: in definitions of risk the *sciences' monopoly on rationality is broken*. There are always competing and conflicting claims, interests and viewpoints of the various agents of modernity...(1992:29)

Thus, Beck argues that 'reflexive modernity' is characterized by a general loss of faith in science due to these conflicting claims, interests and viewpoints which are often manifested through expert systems and suggests that now risk and uncertainty permeate modern society. For Beck, the concept of a risk society is concerned with issues surrounding risk, uncertainty

and control. Beck (2002) states: “the speeding up of modernization has produced a gulf between the world of quantifiable risk in which we think and act, and the world of non-quantifiable insecurities that we are creating...as soon as we speak in terms of ‘risk’, we are talking about calculating the incalculable, colonizing the future” (2002:40). Thus, the risk society thesis does not suggest that modern life is inherently more dangerous, but does suggest that modernization risks have been debounded and that the “central issue in world risk society is how to *feign control over the uncontrollable...*” (Beck 2002:41). In an effort to control the uncontrollable, scientists now speak in terms of probabilities. However, as Beck points out in his earlier work, there can be no objective expert on risk. Beck argues that science and social values become entwined: “many scientists do go to work with the entire impetus and pathos of their objective rationality, and their effort to be objective grows in proportion to the political content of their definitions. But at the center of their work they continue to be reliant on social and thus prescribed expectations and values” (1992:29). Despite this, the competition between rationality claims maintains the distinction between science and the social, as they strive for acceptance (Beck 1992:30). In other words, “what becomes clear in risk discussions are the fissures and gaps between *scientific* and *social rationality* in dealing with the hazardous potential of civilization. The two sides talk past each other” (Beck 1992:30).

Although Beck is speaking of modernization risks, his work is an important starting point for an analysis of the expert/lay divide. In World Risk Society (1999), Beck opens up a more expansive view of expert knowledge by asking some important questions in regard to modernization risks: “this is precisely where the future of democracy is being decided: are we dependent in all the details of life-and-death issues on the judgments of experts, even

dissenting experts, or will we win back the competence to make our own judgment through a culturally created perceptibility of the hazards” (1999:71). Answering these questions proves increasingly complex. By allowing for a more culturally influenced sense of hazards or risks, Beck seems open to the possibility of redefining expertise and recognizes public involvement in risk discussion by quoting Lau (1991):

debates over risk definitions and their consequences for society take place essentially at the level of public (or partially public) discourses. They are conducted with the aid of scientific arguments and information, which serve, so to speak, as scarce resources of the collective actors. The scientifically penetrated public sphere then becomes the symbolic location of conflicts over distribution even if this is disguised by the objectified, scientific autonomous logic of specialist argument about risk (Lau 1991:254).
(Beck 1999:83)

Beck (1999) also explains two theories of knowledge involved with reflexive modernization: *linear* and *non-linear*. Linear theories of knowledge involve an expert monopoly on acting on knowledge and seek to limit claims to expertise, while non-linear theories call for an “open, multiple field of competitors acting on knowledge” (Beck 1999:125), where dissent and conflict over rationality are commonplace. (Beck 1999:124-125). According to Beck (1999:125), this distinction between linear and non-linear theories of knowledge “cannot be mapped unambiguously onto” theorists such as himself and Giddens. Instead, aspects of each can be garnered from of their respective works.

Beck (1999) then goes on to critique linear theories of knowledge and moves slightly outside of his previous thoughts on the expert/lay knowledge dichotomy: “a double construction of unawareness characterizes linear modernization. First, *other* forms of knowledge are blocked out and rejected, and, second, we deny our own *inability* to know. This applies not just to experts, but to activist movements as well” (1999:131). By

commenting on *our inability to know*, Beck throws into question our societal valuation of scientific expertise and explicates their vulnerability in regard to hazardous modernization risks. For Beck, “both issues of the second modernity - the deliberate acknowledgement of outside perspectives and rationalities, on the one hand, and the explicit working out and processing of unawareness, on the other- have not really become an issue so far” (1999:131) and “the crucial issue of reflexive modernization, however, is this: how do 'we' (experts, social movements, ordinary people, politicians, not to forget sociologists) deal with our unawareness (or inability to know)? How do we decide in and between manufactured uncertainties?” (1999:132). By uniting experts and lay people in an inability to know, Beck (1999) begins to break down the privilege of scientific expertise so apparent in the work of Giddens (1990, 19991) and in his own earlier work, but ultimately falls short of carving out a place for legitimate lay knowledge.

Both Beck and Giddens have been useful in framing discussion on expert and lay knowledge; however, their arguments are problematic in certain respects. Both assume conflicting expertise systems as a novelty of modernity and frame their argument through the dichotomy of expert/scientific versus lay/common-sense knowledge. Admittedly, this is more problematic in Giddens' work. While Beck (1999, 2002) does make a solid attempt at breaking down theories of knowledge, he largely limits his analysis to variations on expertise and pays little attention to variations of lay knowledge or the possibility of hybrid forms of knowledge. Giddens attempts to explore the interaction between expert and lay knowledge by examining doctor-patient relations in regard to risk, however, he falls short of breaking down this binary between expert and lay knowledge:

medical specialists and other researchers produce the materials from which risk profiling is carried out. Yet risk profiles do not

remain the special preserve of the experts. The general population is aware of them, even if it is often only in a rough and ready way, and indeed the medical profession and other agencies are concerned to make their findings widely available to laypeople (1991:120).

Thus, for Giddens, claims to expertise are dependent on credentials, despite being followed based on their ability to construct legitimacy. Although credentials are an important means of constructing legitimacy, by equating expertise to the possession of credentials, Giddens limits the definition of expertise. This narrow view leaves no room for expertise that emerges and gains authority and legitimacy based not on credentials, but on other means, such as experiential knowledge. Beck (1999) recognizes Giddens' shortcoming:

yet, in equating reflexive and *expert-determined* modernization, Giddens underestimates the *pluralization* of rationalities and agents of knowledge and the key role of known and repressed types of unawareness, which constitute and establish the discontinuity of reflexive modernization in the first place. Giddens thus misunderstands the questioning of the foundations of expert-determined modernization as well as the various efforts to create forms and forums of debate inside and outside of organizations in order at least to tie these contradicting rationality claims into a discursive context and a consensus on procedure (1999:130-131).

However, while Beck recognizes the possibility, he does not afford further discussion to it. . Neither Beck nor Giddens satisfactorily explores the complex relationship between expert and lay knowledge, nor moves beyond realist assumptions of this divide to explore the constructed nature of knowledge⁹. With that said, their work does provide an excellent basis for further exploration of this topic.

In contrast, Mary Douglas was one of the first cultural theorists to attack the expert-lay dichotomy in order to determine how perceptions of risk are culturally influenced

⁹ Beck does attempt this through his discussions on the 'real' and 'constituted' nature of risk (1999, 2000, 2002), but does address the constitution of alternative forms of knowledge related to expertise.

(Lupton 1999). Addressing the issue of disagreement in the expert world, Douglas and Wildavsky (1982) begin a critique on the assumed objectivity of science:

if the lack of agreement among scientists were due to absence of knowledge, as information increases, disputes would decrease. On the other hand, better measurement opens more possibilities, more research brings more ignorance to the light of day. The tendency toward confrontation instead of disputation may be due to the kind of questions asked... (1982:63-64).

By addressing the epistemological underpinnings of scientific research, Douglas and Wildavsky recognize the political nature and inherent biases of scientists in general (1982:64) and expose the cultural exclusion of subjectivity in the authority of scientific evidence: “Something has gone badly wrong with the idea of objectivity. It is taken out of context and turned into an absolute value for all discourse. The rules that produce objectivity rule out someone's subjectivity” (1982:72). This critique of objectivity opens up the area between expert and lay knowledge and moves beyond a strict model of lay dependence on expertise. As Douglas and Wildavsky suggest,

thinking about how to choose between risks, subjective values must take priority. It is a travesty of rational thought to pretend that it is best to take value-free decisions in matters of life and death...One salient difference between experts and the lay public is that the latter, when assessing risks, do not conceal their moral commitments but put them into the argument, explicitly and prominently (1982:73).

Thus, for Douglas and Wildavsky (1982) while experts have the weight of science and objectivity on their side, laypeople are culturally influenced and admittedly biased; lay assessment of risk exists, but is considered differently than expert risk assessment.

The acknowledgement of lay risk assessment brings the polarized expert-lay dichotomy into question. In her discussion of Douglas, Lupton states, “lay responses to risk

should not be considered as erroneous or biased if they differ from expert assessments. Rather, their use and value within a particular cultural context needs to be acknowledged” (1999:37). While Douglas and Wildavsky recognize the culturally influenced practice of lay assessment she does not seek equality between expert and lay knowledge, but only recognizes the differing value of both when making risk choices:

everyone, expert and layman alike, is biased. No one has a social theory above the battle. Knowledge of danger is necessarily partial and limited: judgment of risk and safety must be selected as much on the basis of what is valued as on the basis of what is known. Thus the difference diminishes between modern mankind and its predecessors. Science and risk assessment cannot tell us what we need to know about threats of danger since they explicitly try to exclude moral ideas about the good life. Where responsibility starts, they stop (1982:80-81).

While Douglas lays the groundwork for infusing risk and knowledge with culture, she too is criticized for associating expert knowledge with objective science and lay knowledge with contamination: "in such writings [Douglas and others], as in much of the other psychometric and psychological literature, the risk judgment of 'experts' continue to be privileged as 'objective' and 'factual' over those of lay people, against which perceptions are compared and found wanting" (Lupton 1999:57). Therefore, while Douglas questions both objectivity and the expert-lay dichotomy, it is other theorists that break down the dichotomy in favour of a knowledge continuum.

Where Douglas fails, Brian Wynne succeeds by directly critiquing “the epistemologically realist underpinnings of the political edge of ‘reflexive modernity’” and the “almost exclusive focus on expert knowledge” by both Beck and Giddens (Wynne 1996:44). He goes on to critique Giddens explicitly: “although expert systems were central to these processes, in Giddens’s account public trust in experts was not an issue, and reflexive

processes were driven by private responses to the interventions by expert systems in intimate microsocial worlds” (Wynne: 1996:47). Thus Wynne sees the expert-lay relationship less in terms of dependency and more in terms of dialectics. According to Wynne, “the predominant perspectives on the risk society...implicitly treat the non-expert world as epistemically vacuous” (1996:61). He then goes on to state:

this is a diminished view of both science and lay knowledge. It recognizes nothing of the fluidity, porosity and the constructedness of the boundaries between them; and, as well as misconceiving the conflicts between public and scientific knowledges, it recognizes nothing of the interaction and mutual inspiration or dependency which may exist between them (Wynne 1996:62).

The complex interaction between expertise and laity is evident in Wynne’s analysis of Cumbrian sheep farmers when he paraphrases one particular farmer: “in other words, we might look as if we trust them, but just because we have no choice but to ‘believe them’ doesn’t mean we don’t have our own beliefs” (Wynne 1996:66). In this sense, Wynne is alluding to lay knowledge (or lay beliefs) as being a form of informal expertise in and of itself. While recognizing the possibility of alternative knowledges, Wynne is also highly critical of the constructed boundaries between expert and lay knowledges: “by falling into a resultant binary idiom, much of the sociological debate on modernity has crippled itself by an uncritical absorption and reflection of this rhetoric, even whilst affecting a critical orientation” (1996:74). However, he is also quick to point out that he is not equating lay knowledge to expert knowledge, but is seeking to acknowledge interdependencies that are not commonly addressed: “it is important not to misunderstand this as a claim for intellectual superiority or even equivalence for lay knowledges...However, it does imply much greater interdependence than is conventionally recognised between what come to be defined as lay

and expert knowledges” (Wynne 1996:74). Wynne also recognizes the cultural component of various knowledges: “once one introduces the idea that scientific knowledge itself embodies a particular culture – that is, it disseminates and imposes particular and problematic normative versions of the human and the social – then this fundamental divide is no longer tenable” (1996:77). In other words, Wynne suggests something more complex than a simple dependence of lay persons on conflicting expert systems: that both scientific expert knowledge and lay knowledge are socially constructed and exist as an interdependent dynamic rather than a static dichotomy. In this sense, he is not privileging one form of knowledge over the other or equating the two, but arguing for less polarization between the two.

Wynne also moves beyond discussions of conflicting expert claims and explores the contestation that often occurs between scientific expertise and public lay knowledge. Considering the case of the Cumbrian sheep farmers, Wynne states: “the scientists ignored the farmers’ informal expertise when they devised and conducted field experiments which the farmers knew to be unrealistic...This was a typical arena in which expert knowledge and lay knowledge interacted and directly conflicted over the appropriate design of scientific experiments” (1996:67). By examining potential conflicts between expertise and lay knowledge, Wynne recognizes lay challenges to expertise as commonplace. He goes on to suggest, “these were not a matter of lay public ‘cultural’ responses to ‘meaning neutral’ objective scientific knowledge, but of cultural responses, to a cultural form of intervention – that is, one embodying particular normative models of human nature, purposes and relationships” (Wynne 1996:67-68). Therefore, like Douglas, Wynne is critiquing the assumed objectivity of scientific expertise. However, unlike the others, Wynne starts to

question the role of public knowledge in the changing definitions of expertise, which is evident in his critique of Giddens, Beck and Collins and Pinch (1994):

an absolute boundary between expert knowledge and lay public knowledge is again reinforced, in which the latter only has purchase on local application. Like Giddens he appears to hold the view that when there is no expert conflict there can be no problem. There is no role for lay publics in evaluating and participating in the redefinition of what is to count as 'expert' knowledge, and no role recognised in renegotiating the proper constitution of scientific knowledge...(Wynne 1996:77).

Aside from breaking down the conventional polarized binary of expert-lay knowledge, Wynne's work is also important as it exposes the potential of lay public knowledge and acknowledges potential challenges to the definition and constitution of both experts and expertise in response to risk.

The Doctor-Patient Relationship: The Doctor's Point of View

Before looking at more elaborated theories focused on changing relations of expertise it is important to examine a practical example of relations between expertise and lay knowledge: the doctor-patient relationship. More importantly, I want to examine how the medical community views this relationship before examining neo-liberal trends that change and impact this relationship. Most discussion by members of the medical community surrounding this changing relationship emphasizes the need for patient education and autonomy and thus, frames responsibility in terms of physician responsibility to his or her patient. Ami Schattner and Merav Talarticle (2002) discuss the concept of patient autonomy in their work on disclosing serious diagnoses to patients:

the concept of patient autonomy has been widely accepted as a basic ethical principle. The right of a patient to control his or her treatment has largely superceded the former paternalistic

approach of physicians, and it has become increasingly apparent that most patients desire information about their illness and want to be involved in making medical decisions (2002:66).

Schattner and Talarticle (2002) recognize the shift toward greater patient involvement and go on to argue that “to become a partner in decision making about one’s health, however, a patient needs to be well informed, and the primary source of information remains the treating physician” (2002:66). Schattner and Talarticle (2002) have a tendency to take for granted the role of the physician as the primary source of information. For Schattner and Talarticle (2002), it is the physician’s responsibility to educate the patient in their illness in order to achieve a more equitable process of shared decision-making. They have a limited conception of how patients can become a ‘partner in decision making’ that does not recognize the multiple sites of expert and lay knowledge available outside the confines of the doctor-patient relationship.

James L. Hallenbeck (2002) and Ruth P. Wilson et al. (2002) express a marginally more sensitized view of doctor-patient relationships in their work on patient decision-making, communication and lay beliefs. While Wilson et al. (2002) view divergent lay beliefs as a barrier to controlling medical conditions¹⁰, they emphasize that a “lack of appreciation of these lay beliefs by providers may contribute to noncompliance and poor rates of hypertension control” (2002:26). In their study, Wilson et al. found

that, in contemporary low- to middle-income urban African-American community, the predominant beliefs about hypertension diverge sharply from current medical understanding in several important ways. High blood pressure was often defined by varied personal experiences rather than by a specific sphygmomanometer reading...the basis for medical definition and treatment goals (2002:29).

¹⁰ This particular study focuses on Hypertension.

It is clear, and not surprising, that Wilson et al. (2002) are privileging scientific means of measurement and diagnosis over lay experiential knowledge¹¹. Thus, while Wilson et al. (2002) maintain that lay beliefs must be acknowledged in doctor-patient interactions, they do not attribute any authority or authenticity to lay knowledge. Anything that is in direct conflict with their medical definitions is seen as wrong and treated as an obstacle that must be overcome.

James Hallenbeck (2002) expresses frustration over doctor-patient disagreement, but with more emphasis on communication and physician empathy: “A good rule of thumb is ‘what doesn’t make sense from the outside may make sense from the inside’. Coming to understand the sense in our patients’ stories does not mean we must agree with their interpretations, but it does open a door to better communication and mutual understanding” (2002:74). However, Hallenbeck (2002), and the authors he applauds (Bravata et al. 2002), work with a narrow perspective about rational decision-making. For Hallenbeck (2002), rationality is equated simply to a “dispassionate weighing of facts, risks, and benefits” (2002:73). On the other side of the spectrum, Hallenbeck (2002) sees ‘explanatory narratives’ as a more accurate depiction of patient decisions, as these narratives incorporate personal experience into the decision making process. The two seem completely separate in his analysis, suggesting that clinicians operate in one realm and patients in another: “the cultural divide here is between clinicians living in a medical world, which values rational, ‘evidence based’ medicine, and patients struggling with decisions that are as intensely personal as they are medical” (Hallenbeck 2002:73). Thus, a patient forfeits rationality and draws upon the personal only when disagreement with the clinician or the accepted medical evidence occurs.

¹¹ It should be noted that I myself do not intend to privilege one over the other, if it has not already been made clear. My purposes are to explore the relations between expertise and lay knowledge, not to establish one or the other as the most important.

This narrow view of rationality and experiential knowledge draws severe limits in contemporary society where disagreement among medical doctors, experts and medical organizations is as common, if not more prevalent, as doctor-patient conflict. Hallenbeck (2002), like so many others in recent medical journals (Bravata 2002, Wilson et al. 2002, Schattner and Talarticle 2002, Perneger et al. 2002) falls trap to an unwavering privilege of scientific norms, measurements and knowledge. One positive note on Hallenbeck (2002) concerns his recognition of a consumer driven health care system that is influencing changes to the role of the clinician:

explanatory narratives are also notable for what they do not stress and for what is assumed. Clinician narratives tend to assume that it is the physician who is the primary decision maker, whereas the patient's role is to consent or disagree with what the physician decides. This conflicts with a consumer-oriented model of decision making in which clinicians may advise, but patients ultimately drive the decision (2002:73-74).

While Hallenbeck (2002) is open to the possibility of increased patient responsibility in the decision making process, he stops short of allowing for a 'meeting between experts'¹² (Tuckett et al. 1985) and relies heavily on dichotomized views of scientific expertise and lay experiential knowledge.

Dawn M. Bravata et al. (2002) also examine the doctor-patient relationship and the medical decision making process. According to Bravata and her colleagues, patient perspectives are becoming increasingly more important to doctor-patient communications and decisions in light of several trends: the shift away from paternalism, a requirement of informed consent for procedures, the wide availability of medical information in other mediums and the conception of medical organization guidelines extolling the benefits of

¹² This concept of a 'meeting between experts', as proposed by Tuckett et al. (1985), will be discussed later in this chapter.

patient perspectives (2002:22). However, clinicians are not always readily accepting of this approach, nor does the issue always arise within the confines of the consultation. As Bravata et al. (2002) suggest,

clinicians are not likely to explore the decision-making process of patients when patients agree with their recommendations or defer to their opinions. The decision-making process of patients, however, comes to the attention of clinicians when patients disagree with their recommendations, do not adhere to a medical regimen, are asked to provide informed consent, or when clinicians and patients must make a decision when there is no clearly correct choice (2002:22).

This is interesting for several reasons. First, it exhibits various positions that have been previously discussed. It makes explicit that lay knowledge and perspective is of little importance in a situation where medical experts have extreme authority and are not challenged; a more typical dependency exists. However, this work also shows that conflict is common, whether it be among doctors and patients or among ‘correct’ choices. It becomes clear that clinicians are responding to the challenges and disagreement brought by patients in light of contested medical knowledge. By examining women’s decisions about Hormone Replacement Therapy (HRT), Bravata et al. (2002) look more closely at a patient’s preferences about the role of her physician in the decision making process: “the stated preferences for the role of the clinician included active guidance in making the decision, provision of medical information, interpretation of the medical data about hormone replacement therapy, and provision of personalized assessments of the risks and benefits of hormone replacement therapy given the woman’s particular medical situation” (2002:24). The situation described here is much more in line with a partnering between doctor and patient rather than a patient dependency on the doctor. In addition to the resources patients have drawn from their primary health care provider, “women also cited colleagues, friends,

family members, print and other media, medical sources and the Internet” (Bravata et al. 2002:24) as sources of amassing guidance regarding their medical decisions. Bravata et al. (2002) have a much more expansive view of doctor-patient communication and knowledge sharing. While they do not go so far as to establish the existence of lay expertise, they do recognize cultural and experiential influences of lay knowledge. Their work represents an effort at opening up the doctor-patient consultation to include alternative means of understanding both expertise and lay knowledge in the context of medically complex decision making.

Understanding how doctors view their own expertise, what knowledge is knowable by the patient and what role both doctor and patient play in the doctor-patient relationship is valuable in several respects. First, the doctor-patient relationship is an excellent example in looking at contemporary relations of expertise, lay knowledge and the emergence of hybrid knowledges. Also, understanding the doctor-patient relationship in the context of theoretical arguments concerning the expert-lay divide provides a solid framework in which to analyze the challenges to expertise that are increasingly more prevalent in a consumer driven health care system where contested medical knowledge is somewhat of a norm. How a doctor views his or her relations with patients has direct implications in a system where partnerships are becoming more common than dependent relationships. What happens outside the confines of the partnered doctor-patient relationship, specifically within Internet discourses, will be a focus of subsequent chapters.

Health, Responsibility and the Emergence of Informal Expertise

Medical authors are not the only people writing about trends impacting the doctor-patient relationship. Sociological and political theories also help in examining the emergence

of hybrid knowledges and new conceptualizations of expertise. Exploring the concepts of responsibility and choice in the context of neo-liberalism is necessary in order to understand the emergence of informal expertise as a newly constituted form of knowledge. As previously suggested, risk, as a technology of governing is prevalent in contemporary neo-liberal society. Risk governance is particularly prevalent in the field of health and preventive medicine where risk, responsibility and expertise are extensively intertwined.

Two basic tenets of neo-liberalism are important for this discussion: individual responsibility and market fundamentalism (Ericson et al. 2000). The first deals with the expectation that individuals will assume responsibility for their lives, rather than become a dependent of the state (Kendall 2003:5). The emphasis on market fundamentalism is also of relevance as free-market competition, in all areas, figures prominently in contemporary neo-liberal society. As Ericson et al. suggest: “a ‘free-market’ is supposed to provide security and prosperity by encouraging fragmented individuals and collectivities to participate in market relations that stimulate economic growth and...manage risk” (2000:533). These basic points impact relations of expertise and help explain the relevance of a shift toward a more prevention based health care system. Thomas Osborne talks about the shift of governance in the medical field and suggests that neo-liberalism seeks to ‘empower’ the patient without ‘disempowering’ clinical expertise; in other words, neo-liberalism “institutes a novel form of medical government in which physicians are enrolled – alongside managers, certainly – as something of administrators and economists themselves” (Osborne 1993:353). So, while the logic of money and markets does not override clinical expertise and ‘truth’, it does regulate it (Osborne 1993:354).

Where markets reign, competing expert claims will exist. To examine the competition and marketization of expertise and health care, we must also look closer at the neo-liberal subject¹³. According to Pat O'Malley (1996), the assumption is that “the rational individual will wish to become responsible for the self...for this will produce the most palatable, pleasurable and effective mode of provision for security against risk...the rational and responsible individual will take prudent risk-managing measures” (1996:199-200). Confronted with a free enterprise of expertise, the responsible individual can ‘shop around’ to determine the best course of action for governing risk. As O'Malley (1996) suggests, “the prudential subject...enters ‘partnerships’ with public authorities (e.g. police), or becomes the ‘customer’ – literally or figuratively depending on the degree of marketization of the service” (1996:203).

Mitchell Dean also discusses how interaction is governed by the logic of market rationalities: “one outcome of the critique of professional expertise and knowledge has been to make the application and use of expert knowledge dependent upon the 'choice' of those formerly regarded as clients of service” (1999:154); in other words “the consumer is sovereign”(1999:154). Dean goes on to suggest: "the responsibilities for risk minimalization become a feature of the choices that are made by individuals, households and communities as consumers, clients and users of services...[and this] multiplies the domains to be monitored and prudently managed” (1999:166). Despite the multitude of risk governed areas and the expectation of consumer partnering, Dean confronts the inevitable: as prudential subjects we manage risk extensively but it never completely disappears:

¹³ It should be noted that on several occasions in this thesis that I will make references to persons in the abstract, such as ‘the neo-liberal subject’ or the ‘responsible, self-governing dieter’. These references are not to actual persons following neo-liberalism but instead point to what the ‘person’ (the subjectivity) envisioned in neo-liberal politics would do.

today the active citizen must add the monitoring of their risks of physical and mental ill-health, of sexually acquired disease, of dependency (on drugs, alcohol, nicotine, welfare or in personal relationships), of being a victim of crime, of a lack of adequate resources in retirement, of their own and their children's education, of low self-esteem and so on. Further what is calculated is not the dangerousness of certain activities (e.g. gambling, drinking, poor hygiene), places (the alehouse, ghettos) and populations (the dangerous classes) but the risks that traverse each and every member of the population and which it is their individual and collective duty to control. Dangerousness is a qualitative judgment based on observable symptoms or empirical occurrences. Risk is both qualitative and quantitative...risk is a continuum rather than a clear break. Risk, in this sense, never completely evaporates. It can be minimalized, localized and avoided, but never dissipated (1999:166).

Thus, the expectations of responsible citizenry and marketization form a set of complex interactions between individuals and expertise where risk minimalization is paramount but also dependent on our ability to 'buy' into what is being 'sold'.

This interaction between individuals and expertise is integral to neo-liberal governance. Neo-liberalism, or 'advanced liberalism' as termed by Nikolas Rose, "is dependent, too, upon a particular relation between political subjects and expertise, in which the injunctions of the experts merge with our own projects of self-mastery and the enhancement of our lives" (Rose 1996:61). Because preventive medicine is frequently based on lifestyle changes, particularly for preventive weight loss, it exemplifies how individuals assume responsibility for their well-being by forming 'partnerships' with systems of expertise. These partnerships mark an important change in expert-lay relations. Lay individuals are no longer dependent on the expert but engage with multiple sites of formal and informal expertise to amass knowledge suited to their specific needs.

Sociology and Health Partnerships

As noted above, social theorists understand relations of expertise and lay knowledge differently from the medical community. These partnerships become even more interesting when we look more closely at responsibility and its impact on health and well-being and the doctor-patient relationship. While O'Malley (2000) argues that "common law has been, and remains, decidedly ambivalent about the status of expert knowledge, and the law of evidence makes very clear that expert evidence is admissible only where the lay person cannot be expected to have their own form of knowledge about matters" (2000:479), health is one area where laypersons are expected to both shoulder the responsibility of well-being and risk reduction, and depend on experts for guidance and authority. In other words, individuals can be both self-governing and governed by experts.

Monica Greco (1993) is perhaps most explicit in describing the shift toward a self-governing responsible individual, to whom risk of disease is central. According to Greco,

the pathologization of risk goes hand in hand with the pathologization of life, with the perceived need to make every aspect of one's life 'healthy' (as if it were not healthy to start with). In this modified perception, the pursuit of 'healthiness' before disease conveys connotations of alarm and urgency: to 'prevent' becomes already to 'cure' something (1993:360).

Both expert and layperson are now involved in this 'pursuit of healthiness'. While previously it was the physician's duty to treat symptoms of disease as they occurred, now both the physician and patient are to be actively involved in the assessment of risk factors and consequent preventive lifestyle changes. This shift is particularly evident in obesity as without surgery, the minimalization of risk is strictly based on behaviour modification for the patient. The title of the WHO report, *Obesity: Preventing and Managing the Global Epidemic*, epitomizes Greco's concept with the emphatic usage of both 'prevent' and

'manage' in the title. Greco (1993) pushes this concept of responsibility and goes as far as terming it a *duty to be well*, in reference to preventive medicine. According to Greco,

a moral responsibility has become associated with prevention...It is, as Crawford has rightly suggested, as if the sick-role became operative before the onset of the illness itself, where the 'duty to get well' becomes retranscribed as a 'duty to stay well' (Crawford 1977, 1980). In this somewhat modified reciprocal disease always implies a personal fault, and yet the patient must always be excused (Greco 1993:370).

With that said, the pursuit of healthiness is dependent on the willingness of neo-liberal subjects to accept responsibility and make rational choices regarding health risks. This impacts perceptions of healthiness, as Greco states:

that health *cannot be imposed*, that it is contingent on the *will* of individuals, on their readiness towards modifying their lives and looking at them differently, all this follows from a psychosomatic perspective and has been well understood, it seems, by the designers of stress prevention schemes. A health that can be 'chosen', however, represents a somewhat different value than a health one simply enjoys or missed (1993:369)

Thus while the responsibility of wellness has shifted toward the self-governing individual, the expert who acts in conjunction with the patient does not escape responsibility entirely.

Similarly, Lealle Ruhl argues "the shift from a collective view of responsibility for risk to a more individualized model is particularly pertinent in the realm of health care" (1999:97) and thus, "the risk society is fundamentally dependent on the willingness of 'the governed' to assume the responsibility - for their health, their safety, their environmental security - integral to self-regulation" (1999:101). Given that her previous arguments equate responsibility with rational behaviour, "the term [responsibility] presupposes a calculation of expected benefits and risks, and a decision to follow the path with the greatest possibility of benefit and the least risk" (Ruhl 1999:96). Therefore, just as Ruhl's 'responsible pregnant

woman' must maximize benefit and reduce risk, the 'responsible person' diagnosed with obesity must now assume responsibility for risk reduction through weight loss. The responsibility for healthiness is not to be taken lightly. Ruhl states: "the ideal liberal citizen thus possesses remarkable quantities of self-discipline and in responsible form refrains from activities which impart a burden on others. If his actions do result in a burden being placed on society as a whole, he alone is responsible for resolving that burden" (1999:110)¹⁴. However, as Greco (1993) has suggested earlier, this total burden Ruhl suggests is not always existent in the context of the doctor-patient relationship. Within the confines of this relationship, individuals are both responsible and engaged in terms of health and well-being, but the expert physician assumes liability.

However, this responsibility to govern one's health is not an easy task and as Rose (2001) suggests:

this new 'will to health' is increasingly capitalized by enterprises ranging from the pharmaceutical companies to food retailers. And a whole range of pressure groups, campaigning organizations, self-help groups have come to occupy the space of desires, anxieties, disappointments and ailments between the will to health and the experience of its absence. Within this complex network of forces and images, the health-related aspirations and conduct of individuals is governed 'at a distance', by shaping the ways they understand and enact their own freedom (2001:6).

Therefore, the responsabilization of health is marked by a proliferation of competing expert and lay knowledges, more complex in nature than the scenario described by either Beck or Giddens. Newly constituted forms of knowledge emerge in the context of this proliferation, exposing individuals to multiple sites of knowledge when assuming responsibility for health and well-being.

¹⁴ Although Ruhl (1999) discusses features of 'liberal' subjects, she is much more in line with a concept of liberalism similar to neo-liberalism, 'advanced liberalism' and the risk society.

In their analysis of North American education efforts on ‘date rape’ drugs, Moore and Valverde were forced to establish a new means of dealing with complex hybrid knowledges. The contested nature of medical and lay knowledge about the Atkins diet also appears to be an arena where risk is constituted and managed “with a wide variety of heterogeneous knowledge formats and governing techniques, and thus calls for a more eclectic analysis than is perhaps typical in ‘risk’ studies” (Moore and Valverde 2000:515). Moore and Valverde go on to argue that “it is not always necessary or appropriate to divide knowledges using the binary opposition of expert vs. lay, scientific vs. common-sense that underlies the debate between Douglas and the proponents of the scientific rationalization thesis” (2000:520). Sites of knowledge emerge that exist outside the polarized definitions of both positivistic scientific expertise and common-sense lay knowledge. The marketization¹⁵ of health in the context of neo-liberalism, or what Rose (1996) terms *advanced liberal democracies*, has a great impact on relations of expertise. Rose discusses the shift in the authority of the expert:

simultaneously, the very powers that the technologies of welfare accorded to experts enabled them to establish enclosures within which their authority could not be challenged, effectively insulating experts from external political attempts to govern them and their decisions and actions. In contrast, advanced liberal modes of rule have a certain “formal” character. The powers once accorded to positive knowledges of human conduct are to be transferred to the calculative regimes of accounting and financial management. And the enclosures of expertise are to be penetrated... (1996:54)

In other words, “one sees a reconfiguration of the political salience of expertise, a new way of “responsibilizaing” experts in relation to claims upon them other than those of their own

¹⁵ According to Rose (1996), marketization “seeks various forms of distance between the political and the expert machines: an apparent devolution of regulatory powers from ‘above’ – planning and compulsion – to ‘below’ – the decisions of consumers. In its ideal form, this imagines a ‘free market’ where the relations between citizens and experts are not organized and regulated through compulsion but through acts of choice”. (1996:54).

criteria of truth and competence, their assembling into new relations of power” (Rose 1996:54-55). Thus, in advanced liberal democracies, the authority of expertise can be challenged and is increasingly challenged as individuals assume more responsibility in terms of health. Rose (2001) suggests later, “every citizen must now become an active partner in the drive for health, accepting their responsibility for securing their own well-being. Organizations and communities are also urged to take an active role in securing the health and well-being of their employees and members”, returning to earlier discussions of partnerships and the prudential subject (2001:6). Recognizing the effect of both marketization and responsibility on health as a field of governance, allows for the emergence of new forms of expertise, neither completely scientific nor completely lay in nature. The marketization of health exposes the necessity of choice in forming partnerships, and as Novas and Rose (2000) state, “once choice is seen as paramount, knowledge is required to make informed decisions” (2000:503).

This responsibility of informed decision-making enables the emergence of informal forms of expertise. In their study of genetic risk, Novas and Rose (2000) elucidate the existence of other sites of knowledge that cannot be understood in the typical expert-lay dichotomy:

the patient is to become skilled, prudent and active, an ally of the doctor, a protoprofessional – and to take their own share of the responsibility for getting themselves better. Patients at genetic risk and their families are not passive elements in the practice of cure. The studies carried out by Paul Rabinow (1999) as well as Vololona Rabeharisoa and Michel Callon (1998) have shown that such persons – the ill patients themselves, those ‘asymptomatically ill’ and their families – are increasingly demanding control over the practices linked to their own health, seeking multiple forms of expert and non-expert advice in devising their life strategies, and asking of

medics that they act as the servants and not the masters of this process (Novas and Rose 2000:489-490).

The patient exhibits features of the *responsible lay-expert*, a rational lay individual who assumes responsibility for their health and makes an active effort at consuming knowledge related to their condition or disease. Novas and Rose recognize that knowledge exists in multiple sites and that it is now the responsibility of the individual to take an active stance in their health. Novas and Rose elaborate by arguing that

the relations with professional expertise are increasingly conducted at a distance. In the first place, relations are distanced through the medium of hypertext which makes it easier to access medical information... In a second sense, relations are at a distance, in that professional experts are no longer considered as the sole repository or mediator of knowledge, with whom one enters a passive relationship... Somatic individuals, in this case those genetically at risk, engage with this knowledge as interested and avid consumers, aware of the range of knowledge products on the market, and demanding that their choice is constantly expanded (2000:506).

Thus individuals are not just assuming responsibility, they are taking the active stance needed to engage with multiple sites of knowledge emergent from the marketization of health. By engaging directly with medical knowledge through the Internet, individuals educate themselves outside the confines of the doctor-patient relationship. Individuals now bring more to their relations with expertise and are now better equipped to challenge expertise and enter partnerships with experts more inclined to recognize and welcome their active participation.

Lay expertise, however, is not an entirely new concept in sociological literature. As early as 1985, David Tuckett et al. examined doctor-patient communication in their book Meetings Between Experts: An Approach to sharing ideas in medical consultations. Tuckett et al. (1985) studied how and what information is shared between doctors and patients during

consultations and what information patients retain. In an effort to improve communication and satisfaction, Tuckett et al. suggest, “patients could influence both the quality of the information they received and the extent to which doctors responded to their ideas. Patients who behaved more directly as experts, that is those who engaged in overt forms of behaviour, were generally more likely than other patients to receive the kind of information needed to help in their decision-making” (1985:102). They later elaborate further on what constitutes expertise among both doctors and patients and how the *meeting between experts* operates:

we conceive of the consultation as a meeting between one person who has, by his training and experience, access to scarce and specialist knowledge and another person who has, by experience, immersion in his culture and past discussion, a set of ideas about what is happening to him. Both parties form models of what is wrong, what should be done, what are the consequences of the problem, its treatment and so on, based on their own reasoning and background knowledge. A major aim of the consultation, then, is the initiation of a process of explicit sharing of models, so that the patient is placed in a situation, as far as he wants to be, where he can choose to take advantage of the specialist biomedical ideas and skills his medical advisor can offer (Tuckett et al.1985:217).

Thus, for Tuckett et al. (1985) the patient’s expert status lies in their cultural and personal experience and is operational in their assertion during consultations with their physician. By engaging and questioning the physician, the expert patient is sharing and receiving information grounded in both science and culture. This work is important for several reasons. Tuckett et al. (1985) lay the groundwork for understanding informal expertise, based not in science but in experience. However, they still get caught up in the expert-lay dichotomy that has been previously discussed. While Tuckett et al. (1985) recognize multiple types of expert knowledge, the scientific expertise of the doctor and the lay experiential expertise of the patient can still only be separate polarized entities; they can interact respectfully but not

merge. This is where the concept of the *responsible lay expert*, as defined by Novas and Rose (2000) evolves into more of a hybrid form of knowledge, where both scientific and lay discourses are fair game to be consumed by individuals acting as responsible and rational health consumers. Their decisions are informed by the many sites of knowledge available to them in the market of health and their partnering with experts becomes more equitable, in terms of knowledge, than that described by Tuckett et al. (1985).

However, these theorists also meet opponents and others exploring variations on their work. Critiques of risk, the role of expertise and neo-liberalism and its basic tenets are common. Although Peter Kelly (2001) argues for “a productive convergence of theories of reflexive modernisation (Beck et al., 1994) and governmentality (Foucault, 1991)” (Kelly 2001:23), he problematizes a key aspect of neo-liberalism: individual responsibility. As Kelly directly states: “I want to argue for a ‘politics of risk’ that would problematise these processes of individualisation and responsabilisation (Burchell, 1996). Such a politics would also problematise the roles played by institutionalized expertise...and the forms of regulation that flow from these discursive practices” (2001:23-24). This politics would also look at ways of “refusing risk as signifying individual pathology or deficit” (Kelly 2001:31). While Kelly’s work and ambitions are intriguing, he does not fully elaborate upon his ideas regarding the problematisation of responsabilisation. While he does advance the conversation in these areas, his ideas imply a necessary deresponsibilisation and deregulation of risk governance that does not appear evident in many areas, including the governable area of health. Ultimately he gets caught up in “the dangerous promise of certainty” (Kelly 2001:31) prevalent in risk theory, without ever elaborating upon the politics he proposes.

Lindsay Prior takes issue with the concept of a *lay expert* in her study of its emergence in the journal *Sociology of Health in Illness* between 1979 and 2002. For Prior (2003), lay thinking is limited because it is based on experience and can often be flat out wrong. She suggests that there are limits to the expertise a patient can possess and argues that a knowledgeable patient is possible but the term *lay expert* is a contradiction (Prior 2003: 41). She further discusses her basic assumptions regarding expert and lay knowledge:

for my part, I accept that patients can have extensive knowledge of their own lives and the conditions in which they live. I also recognize that they can (and sometimes have to) turn themselves into experts in order to challenge medical hegemony. But I shall argue that, for the most part, lay people are not experts. They are, for example, rarely skilled in matters of (medical) fact gathering, or in the business of diagnosis (Prior 2003: 45).

Prior's conception of expertise is clearly limited and epistemological in nature. Expertise is founded in formal training with no room for alternative forms of education. While she makes some intriguing points in separating experiential knowledge from scientific expertise in terms of patient perceptions regarding Alzheimer's Disease and Influenza vaccines, her argument against the concept of lay expertise seems to rest on the Oxford English Dictionary definition of *Layman* and *Expert*¹⁶(2003:53). While Prior engages with some of the literature that explores more diverse conceptualizations of expertise, she ultimately falls back onto the expert-lay dichotomy and tends to privilege scientific expertise and dismiss the possibility of experiential forms of lay expertise. For Prior, there can be no form of hybrid knowledge. Prior also focuses excessively on the *rights* and *wrongs* of lay knowledge: "perhaps, most important of all, and to echo the warning of Collins and Evans (2002), we should be aware that 'the romantic and reckless extension of expertise has many well-known dangers'

¹⁶ Layman: 1. One of the laity. 2. An outsider of non-expert (esp. in relation to law or medicine).
Expert: 1. Experienced (in). having experience (of). 2. Trained by practice, skilled.

(2002:271). Above all, lay people can be wrong” (Prior 2003:54). For someone so exclusively focused on problems with the ‘correctness’ of lay patient knowledge, she does not at all address the conflicting nature of medical knowledge in contemporary society. Nor does she address the marketization of health that opens up competition between medical experts and allows for challenges to medical expertise. By dismissing the concept of lay expertise based on textbook definitions and the possibility of fallacy, Prior (2003) ignores an entire body of literature dismissing the authority of scientific expertise on the same grounds. To reiterate, this dichotomy of expert and lay knowledge as distinct and polarized entities does not hold up in the context of neo-liberal governance of health risks.

Exploring previous conceptualizations of what constitutes expertise and lay knowledge is an important precursor for this project. By opening up the possibility of hybrid knowledges that are neither wholly expert nor wholly lay in construction, we can begin to grasp a better understanding of the problems and issues this project aims to explore. By examining how Atkins dieters interact with expertise and lay knowledge through the Internet, a form of self-governance emerges where expertise is both employed and constituted alongside experiential lay knowledge. While emergent forms of expertise are not without their critics, I feel that allowing for the presence of emergent and hybrid knowledges and forms of expertise better explains how Atkins diet message board users govern their diet experience and encompasses a broader vision of how expert and lay systems operate in general. Lastly, by allowing for new forms of knowledge, we recognize the realities and potentials that the Internet affords this situation. The next chapters will discuss the

complexities of Atkins debate, self-governing diet expertise and the impact of the Internet on the changing relations of expertise.

Chapter Two

'Competing Claims and the Atkins Diet'

Whether it is called the risk society, some version of neo-liberalism or an advanced liberal democracy, several things are clear about contemporary western society: risk has become prevalent as a technology of government and competing claims about these risks exist in an increasingly complex setting. The interaction between expertise and lay knowledge is not a simple dependence of laypersons on experts anymore and what constitutes expertise is changing as a result. This shift is particularly evident in the context of medical knowledge and affects the doctor-patient relationship, as well as how medical knowledge is consumed outside the confines of this relationship. Before empirically examining the role of Internet message boards, their place within changing relations of knowledge and their impact on how people govern health risks, an understanding of what claims are being made is essential. In this chapter, I will be looking at competing sources of information about the Atkins Nutritionals (1999-2004) program and the low carb lifestyle, both for and against the diet. By examining how these sources of knowledge construct legitimacy and authority for their claims to expertise, and in what ways they interact and engage each other and laypersons, this project develops a politics of Atkins related web discourses.

No matter what theory of expertise and lay knowledge one adheres to, in the context of contemporary western society, the concept of preventive medicine depends on the willingness of neo-liberal subjects to assume responsibility for their health and make rational choices regarding risk. Although the dependency model of expert systems and laypersons, as

described most prominently by Giddens (1990, 1991) and Beck (1992), does not encompass the complex variations of knowledge emerging throughout this project, their works are important to this analysis in several respects. Despite their somewhat narrow views of what constitutes expertise, and while other theorists and models of knowledge are more appropriate for this analysis, Giddens and Beck still represent an important position on modernity or risk society and systems of expertise and knowledge, which is extremely important to this project. Their groundwork and initial ideas form the basis for more elaborate models and their emphasis on dependency provides a crucial point of comparison when developing a broader frame for changing relations of expertise.

For Giddens, daily life is carried out consciously and unconsciously through dependence on expert systems of professional and technical knowledge (1990, 1991), where dependence implies trust or faith. As Cassell states, in his discussion of Giddens, “the modern person’s faith in the reliability of their everyday world is based on a (usually implicit) trust in the efficacy of expert systems” (Cassell 1993:29); however, modernity also possesses a counter tendency where modern subjects experience an ‘unease’ with expert systems due to the general awareness that expert systems are fallible, revisable and highly contestable (Cassell 1993:29). Expert systems are plagued by competing claims, thus the individual placing trust in any expert system is both taking on and managing risk. The unconscious or conscious decision to place trust in any expert system is dependent on the constructed legitimacy of the expert system. Because Giddens (1991) defines expert systems as “systems of expert knowledge, of any type, depending on rules of procedure transferable from individual to individual” (1991:243), credentials and other professional means of establishing legitimacy and authority are dominant methods of constructing credibility.

However, as relations between expertise and lay knowledge change, expertise and legitimacy can also be constructed, it will now be argued, through alternative means.

As previously stated, Beck (1992) claims “in definitions of risk the *sciences’ monopoly on rationality is broken*. There are always competing and conflicting claims, interests and viewpoints of the various agents of modernity...” (1992:29). While he does not explicitly state it, the competition he speaks of is taken up extensively in neo-liberal political theory. The prevalence of competing claims is a direct result of the concept of market fundamentalism, which is central to neo-liberalism. These competing claims exist both within and outside traditional boundaries of expertise and construct legitimacy and authority in terms of both scientific and experiential expertise and knowledge. Regardless of how one views the expert-lay knowledge divide, the competition between experts and other producers of knowledge in the health market exists and allows for emergent forms of expertise. These emergent experts exist on the periphery of established expertise and can have substantial followings. They construct legitimacy and authority by alternative means and represent a potential challenge to professional expertise.

The Internet represents an important ‘space’ for emergent forms of expertise and makes competing claims easily accessible for those assuming responsibility in the pursuit of healthiness. Accessing health information through the Internet has become a routine practice in contemporary western society (Hardey 1999) and the increased popularity of electronic health has emerged as an important issue for medical sociologists. As Nettleton (2004) argues, we need to be concerned with “the manner in which contemporary medical discourses are changing in concert with contemporary patterns of social and technological change” (2004:662). In her discussion of ‘E-Scaped Medicine’, Nettleton states:

“Information is provided by practitioners, but in the information age it is also increasingly accessed and produced by patients themselves” (2004:672). The Internet thus appears as a diverse and accessible forum for informing oneself, which according to Nettleton is raising new problems and issues of expertise. She suggests that “consumer health informatics and electronic health information (e-health) is an issue which the medical profession is concerned about, and indeed forms a further illustration of how information flows beyond the boundaries of modern institutionalized medicine” (2004:672). Electronic sources regarding health and risk represent one site of knowledge that is impacting the changing relations of expert and lay knowledge and also represent a highly important and unique means for emergent forms of expertise. According to Nettleton, “the modern expert...is no longer a person with specialist knowledge, but rather is ‘someone who knows how to access knowledge efficiently and judiciously...’” (2004:671). Health and medical knowledge now flow beyond traditional medical institutions such as hospitals, medical schools and medical practices and are increasingly accessed and produced by health consumers (Nettleton 2004:673). In other words, “it is not just the availability of health and medical information that is salient here, but also the means by which it is disseminated” (Nettleton 2004:673). Knowledge and expertise are thus affected by both availability of information and contemporary technology.

Hardey agrees with Nettleton about the capacities of the Internet in terms of the accessibility of health information and points out that “the Internet constitutes a new and unique medium in which expert knowledge is accessible to anyone with a computer linked to a network or modem” (1999:822). He goes on to discuss the contested nature of health

knowledge available in web resources and how traditional medical expertise can be challenged through competing sources:

Medical dominance is challenged not only by exposing exotic medical knowledge to the public gaze (Good 1994) but also by the presence of a wide range of information about and approaches to health. At the heart of medical autonomy is exclusive access to 'expert knowledge' (Giddens 1991) and the ability to define areas of expertise and practice. The Internet provides a possible threat to this situation (Hardey 1999:822-823).

Both Hardey and Nettleton recognize the importance of the Internet in the changing relationship between expert and lay knowledge. The Internet represents a space where new forms of expertise can emerge and where competing and alternative claims exist in defining what health and well-being constitute. As this project focuses on the controversial Atkins diet, an examination of competing claims is essential before exploring how self-governing dieters negotiate these claims through Internet message boards.

The Atkins Nutritionals Program

The diet industry in North America offers a wide array of choices to the individual confronted with the task of weight reduction. While the official Health Canada (2005) position on weight reduction and maintenance of a healthy lifestyle reflects 'common sense' eating habits¹ and increased activity as the most effective and safe method of losing weight, western consumer industries have capitalized on the demand for faster and more diversified methods of weight reduction. Programs are available to suit many desires, including regimes that celebrate choice, such as WeightWatchers (WeightWatchers International 2004) and Jenny Craig (Jenny Craig, Inc. 2005), as well as those that implement strict nutritional

¹ Such as eating less fattening foods and more vegetables and fruit

restrictions, such as the Atkins Approach (Atkins Nutritionals Inc. 1999-2004). All promise results, if their plans are adhered to, and claim their programs as only suitable for individuals who have consulted a doctor before beginning. While some regimes are recommended by many medical experts, there is contestation over the safety of others. Also, as stated in the WHO report (2000), the safety of any method that results in rapid weight loss is questionable (WHO 2000). The Atkins Nutritionals (1999-2004) program is one diet that has been surrounded by controversy since its inception. The Atkins diet was first established in 1972 by Dr. Robert Atkins through his best-selling book Dr. Atkins' Diet Revolution (Atkins Nutritionals Inc. 1999-2004a) and is based on severe restrictions on carbohydrate intake, while promoting high protein intake.

According to the official Atkins website: “the Atkins Nutritional Approach™ rebalances your nutrition so that you improve your energy level and your appearance and gain a sense of well-being. Following this approach lays the groundwork for a lifetime of better health” (Atkins Nutritionals 1999-2004b). The program is a four phase approach to eating and is considered a lifestyle by the Atkins Nutritionals (1999-2004) official website and their officially authored books.

The four phases of the Atkins program are:

1. Induction
2. Ongoing Weight Loss
3. Pre-Maintenance
4. Lifetime Maintenance (Atkins Nutritionals 1999-2004c)

The first phase, *Induction*, is the most restrictive and recommends that a person should consume no more than twenty grams of carbohydrates per day and that these carbohydrates should come mostly from salad or other *Induction* approved vegetables (Atkins Nutritionals 1999-2004d). The *Induction* phase is also the most medically contested phase. According to

the Atkins website, Induction works by “kick-start[ing] your body into lipolysis/ketosis, switching your metabolism to one that primarily burns fat for energy” (Atkins Nutritionals 1999-2004d)². The next two stages, *Ongoing Weight Loss* and *Pre-Maintenance*, focus on gradually introducing higher levels of carbohydrates based on the individual body’s ability to maintain gradual weight loss (Atkins Nutritionals 1999-2004b). In the fourth and final stage, *Lifetime Maintenance*, individuals are encouraged to “select from a wide variety of foods while controlling carbohydrate intake to ensure weight maintenance and a sense of well-being” (Atkins Nutritionals 1999-2004b); however, refined sugar is to be completely avoided if possible. After reaching this final phase, the Atkins diet becomes a lifestyle and a philosophy and inducts the individual into a preexisting community of like minded people:

unlike a diet, the Atkins Nutritional ApproachTM is a lifetime nutritional philosophy, focusing on the consumption of nutrient-dense, unprocessed foods and vitamin supplementation. Moreover, Atkins restricts processed/refined carbohydrates (which make up more than 50 percent of many people's diets), such as high-sugar foods, breads, pasta, cereal and starchy vegetables. Core vitamin supplementation includes a full-spectrum multivitamin and an essential oils/fatty acid formula. This nutritional philosophy has been embraced by an estimated 20 million people worldwide since the release of *Dr. Atkins’ Diet Revolution* in the 1970s, and was the cornerstone of the treatment protocols for patients of The Atkins Center for Complementary Medicine in New York City (1984-2003) (Atkins Nutritionals 1999-2004b).

The Atkins website also claims that “millions of people have been successful doing Atkins for more than three decades; in fact, the human race has been successful on a low-carb eating plan for 3 million years” (Atkins Nutritionals 1999-2004e) and thus argues that its approach cannot possibly be considered a fad diet (Atkins Nutritionals 1999-2004e). The

² The processes of lipolysis and ketosis and their alleged ability to sustain weight loss in a healthy way are vigorously contested in the medical community and in web discourses. These issues will be discussed further later in this chapter.

website also recommends the Atkins lifestyle for people who do not have a problem with obesity and claims that the lifestyle provides a host of health benefits when employed in conjunction with exercise. In addition to the four phases, there are also four core principles to the Atkins Nutritionals (1999-2004) program:

1. You will lose weight
2. You will maintain your weight loss
3. You will achieve good health
4. You will lay the permanent groundwork for disease prevention (Atkins Nutritionals 1999-2004b)

The Atkins website states that these “four principles form the core of the Atkins Nutritional Approach™ and are supported by a solid foundation of medical and nutritional scientific research” (Atkins Nutritionals 1999-2004b). The goals of the program correspond with the WHO’s four pronged approach to managing the global obesity epidemic:

1. Prevention of weight gain
2. Promotion of weight maintenance
3. Management of obesity comorbidities
4. Promotion of weight loss (WHO 2000:157)

However, the way these four principles are employed, their validity and their alleged scientific support form the basis for the medical controversy surrounding the Atkins program.

Competing Claims

Like other commercialized forms of weight reduction, the Atkins approach claims “to prevent and combat heart disease, diabetes and obesity, all of which have grown to epidemic proportions” (Atkins Nutritionals 1999-2004a). While the Atkins diet appears to be in line with those experts proclaiming the benefits of weight reduction for reducing the risks associated with obesity, the Atkins approach has encountered controversy and disapproval from other prominent medical experts and non-medical organizations. There are many web-

based resources and organizations making claims about the Atkins diet, including formal and informal evidence-based organizations, such as the official Atkins Nutritional ApproachTM and the Physicians Committee for Responsible Medicine [PCRM], strictly medical based organizations, such as the American Medical Association and the Australian Medical Association, and organizations with a clear moral agenda, such as People for the Ethical Treatment of Animals [PETA]. All make claims to expertise in varying degrees and provide scientific studies to back up their claims. Most non-medical based organizations disclaim medical responsibility despite their efforts to construct authoritative legitimacy for their expertise. Many websites employ similar structures in displaying information for public consumption and include a variety of sections addressing the safety of the Atkins diet, including: medical disclaimers and cautions, scientific findings, frequently asked questions, debunking myths, outright attacks on other competing claims and personal testimony. The most vocal websites, the official Atkins site, the Physicians Committee for Responsible Medicine and AtkinsExposed explicitly attack one another's scientific basis and present themselves as authoritative experts on their subject, but officially defer to physicians as the dominant form of expertise on individual weight loss regimes. The various websites all base their claims in 'scientific evidence', but due to competition and conflict, a situation emerges where the argument evolves into a case of 'my science is better than your science and this is why...'. As far as contested claims go, the majority of web-based discourses discuss the safety and healthiness of the Atkins diet, while the majority of lay message board users celebrate the diet³. The substance of these claims and how their producers construct their claims to expertise form the crux of this chapter.

³ Web-based discourses and competing claims are addressed in this chapter while message board discourses will be addressed in the next chapter.

Safety Concerns

The basics of the Atkins Nutritional Approach have already been discussed; however, it is necessary to explore some specific claims in more depth in order to understand how the Atkins Nutritional Approach make claims to expertise and construct their legitimacy. In addition to the official Atkins web site, other major organizations' websites are included: AtkinsExposed, the American Dietetic Association, the American Heart Association, the American Medical Association, the Australian Medical Association, Health Canada, The Physicians Committee for Responsible Medicine [PCRM], The Omnivore, People for the Ethical Treatment of Animals [PETA], Quackwatch, Wrong Diagnosis, WebMDHealth, NHS Direct and the WHO.

While there is a wide range of specific health concerns lodged against the Atkins diet, recurring safety concerns will be addressed by discussion of three main categories: Ketosis and Effectiveness, Uncertainty and Long Term Effects and Reducing Obesity Related Risk Factors.

Ketosis and Effectiveness:

The Atkins website maintains that its diet is natural, healthy, effective and grounded in science. According to Colette Heimowitz, the Director of Education and Research at Atkins Health & Medical Information Services,

A controlled-carbohydrate way of eating is clearly more natural to the human body, but we can see, too, that it is healthier on a number of counts, not the least of which is the reason people usually turn to it today—to lose weight. A rapidly expanding body of research continues to confirm that you can lose weight safely and effectively on a controlled-carb regimen. The

equally gratifying news from this research, however, is that a controlled-carb approach consistently demonstrates health benefits. The primary reason for these benefits is that controlling carbs gets the hormone insulin under control (Atkins Nutritionals Inc. 1999-2004e).

By limiting carbohydrates and sugars, the *Induction* phase puts the body into a state of lipolysis and ketosis, which results in an initial period of rapid weight loss. The Atkins website describes the two processes as follows:

Lipolysis: The natural process of burning Fat for energy. Fat can come from dietary sources or body fat.

Ketosis: Short for Benign dietary ketosis, or BDK, this is a biological process that results when sufficient Glucose as a source of energy is not available from dietary carbohydrate and the body switches to primarily using Fat. Fatty acids are released into the bloodstream, then converted to Ketones, which are used by muscles, the brain and other organs. Excess ketones are excreted in urine. (Atkins Nutritionals Inc. 1999-2004d)

While the Atkins diet celebrates ketosis as a means to rapid weight loss, other sources maintain that ketosis is a medical condition that needs to be treated:

Ketosis is the presence in the blood of abnormally high levels of acidic substances called ketones. The normal body fuel is glucose. Ketones are produced when there isn't enough glucose in the bloodstream, and fats have to be used. When fats are used excessively as fuels, they are eventually converted to ketones. The real danger in ketosis is that ketones are acidic, and high levels of ketones make the blood abnormally acid. (NHS Direct 2002).

A healthy, balanced diet should provide you with all the carbohydrates your body needs. So, normally ketosis will not need to take place and the ketone levels of your blood will be low. However, if your diet is very low in carbohydrates, or if you are starving yourself, ketosis will begin and your blood ketone levels will begin to rise. Because ketones are acidic, prolonged ketosis can be dangerous as it can change the acidity

of your blood beyond the level that your body can tolerate. This may eventually lead to serious damage to your liver and kidneys (NHS Direct 2002).

Ketosis (medical condition): When diabetics get too high blood sugars, the body creates "ketones" as a by-product of breaking down fats. These ketones cause blood acidity which causes "acidosis" of the blood, leading to Diabetic Ketoacidosis (DKA). This is a very dangerous condition that can lead to coma and death (Wrong Diagnosis 2000-2005)

WebMDHealth, a popular e-health site, also describes the theory behind the Atkins diet and its potential side effects:

By restricting carbohydrates drastically to a mere fraction of that found in the typical American diet, the body goes into a state of ketosis, which means it burns its own fat for fuel. A person in ketosis is getting energy from ketones, little carbon fragments that are the fuel created by the breakdown of fat stores. When the body is in ketosis, you tend to feel less hungry, and thus you're likely to eat less than you might otherwise. However, ketosis can also cause a variety of unpleasant effects (such as unusual breath odor and constipation) in a small number of people (WebMDHealth 1996-2004a).

However, by deliberately labeling these propositions as theories, WebMDHealth indicates its indecision about the Atkins diet. After outlining the theory behind Atkins, they go on to address the safety debate by utilizing a variety of 'experts'. They also quote author Barbara Rolls, PhD, who maintains that the Atkins diet only works because it ultimately restricts calories, like many other popular diets: "the diet is very prescriptive, very restrictive, and limits half of the foods we normally eat...In the end it's not fat, it's not protein, it's not carbs, it's calories. You can lose weight on anything that helps you to eat less, but that doesn't mean it's good for you" (WebMDHealth 1996-2004b).

The Atkins website combats the allegations against the ketosis process and its effectiveness in their Debunking the Myths section (Atkins Nutritionals 1999-2004j). With

regard to the dangerousness of ketosis, the Atkins website describes the process in more detail and cites several short-term medical studies that claim ketosis as safe. It also addresses concerns that the Atkins diet is simply a low calorie diet in disguise in an article entitled Fact vs. Fallacy, Part 2:

Fallacy: The Atkins Nutritional Approach™ is only effective for weight loss because calories are restricted.
Fact: While some people who do Atkins may eat fewer calories than before, it is certainly not because the program limits calorie intake. Instead, they may end up eating fewer calories because they are generally less hungry and no longer obsessed with food (Atkins Nutritionals Inc. 1999-2004f).

Ironically, the Atkins website does not debate the claim explicitly but only suggests that dieters eat fewer calories based on other reasons besides explicit caloric restrictions. As with most other concerns over the Atkins diet, the medical community and other web discourses remain in debate over both the safety of the ketosis process and how exactly the Atkins diet evokes such rapid weight loss. Thus, one's perception of what is healthy forms the foundation of one's claims about safety.

Uncertainty and the Long-Term Effects

The WHO acknowledges that few long-term studies exist on the risks of intentional weight loss (WHO 2000). The same is true for the Atkins diet, as it has only existed in its current format for approximately the last three decades. Regardless, most research studies celebrate the benefits of weight loss. However, maintenance of intentional weight loss is uncommon, which may contribute to the apparent lack of long-term diet studies in general. As many as ninety-five percent of dieters fail and regain their lost weight and often more⁴

⁴ Although I am not directly concerned with recidivism rates of dieters, I have included this statistic because the Atkins website makes claims regarding long-term diet success and addresses diet recidivism rates directly.

(Campbell 1995). While most weight loss programs acknowledge this statistic and make disclaimers that caution their followers, the Atkins website is confident that its followers need not worry about the recidivism rate⁵ of general dieting: “recidivism among people who have lost considerable weight is such a well-documented phenomenon that many cynical doctors advise their patients not to even bother trying to lose (Katan et al. 1997). Fortunately, with Atkins such pessimism is unwarranted” (Atkins Nutritionals Inc. 1999-2004k). The longest existing studies examining low-carb and other popular diets only follow dieters for one year (Dansinger et al. 2003, Foster et al. 2003, Stern et al. 2004 and Fleming 2002). Despite Dr. Atkins’ claim that his program is a lifestyle, instead of a diet, no long-term research exists on lifetime Atkins followers and critics often make this argument in an attempt to dismiss Dr. Atkins’ claims (AtkinsExposed 2004a). This alleged lack of long-term scientific research and the resulting uncertainty about long-term health risks or benefits is a major reason for the some of the medical community’s skepticism (Australian Medical Association 1995-2003) about the Atkins diet, and long term dieting in general.

AtkinsExposed.org⁶ claims that of the four one-year studies,

not a single one showed significantly more weight lost at the end of the year on the Atkins Diet than on the control "low fat" diets (Dansinger et al. 2003, Foster et al. 2003, Stern et al. 2004 and Fleming 2002). In the yearlong comparison of the Atkins Diet to Ornish's diet, Weight Watchers, and The Zone Diet, the Atkins Diet came in dead *last* in terms of weight lost at the end of the year. Ornish's vegetarian diet seemed to show the most weight loss (Dansinger et al. 2003). The Atkins website had no comment (Atkins Nutritionals Inc. 1999-2004l). Noting that by the end of the year, half of the Atkins group had

⁵ Diet Recidivism refers to statistics that suggest the majority of dieters do not maintain their weight loss, regardless of which diet they use.

⁶ This website was originally created by Dr. Michael Greger under the domain name AtkinsFacts.org. The Atkins Corporation threatened litigation against Dr. Greger and his site and the domain name was changed to AtkinsExposed.org.

dropped out, and those who remained ended up an unimpressive 4% lighter (AtkinsExposed 2004a).

The first study AtkinsExposed discusses is frequently cited by both sides of the Atkins debate (AtkinsExposed 2004a, Atkins Nutritionals Inc. 1999-2004l) and used to establish both the effectiveness of the Atkins diet and discredit its effectiveness at the same time. Both AtkinsExposed and the PCRM, one of the most vocal groups of medical experts and lay citizens in opposition to the Atkins approach, suggest that the only proven long term weight maintenance plan is one that is centered around high vegetable intake, good fats and good carbohydrates (AtkinsExposed 2004b, PCRM 2004a)⁷. Additionally, another website discusses Bravata at al.'s (2003) study that concludes that the only successful weight maintenance program consists of burning more calories than you consume and that the contemporary 'science of dieting' is relatively scarce in the medical journals (Butler 2004). Regardless, the debate about long-term safety and effectiveness does not appear to be moving toward any sort of resolution in the medical community, allowing the two sides to engage with the same studies and utilize research findings to support their respective positions.

Obesity Related Risk Factors

As stated earlier, the primary concern over obesity relates to the risk factors associated with the condition. According to the WHO, obesity is a key risk factor for the following diseases: cardiovascular disease [CVD], non-insulin-dependent diabetes mellitus [NIDDM], coronary heart disease [CHD], hypertension, gallbladder disease and certain types of cancer (WHO 2000:39). The Atkins website claims that its diet/lifestyle will lead to

⁷ These claims have evoked responses from Atkins and other pro-Atkins organizations that question the legitimacy of the claims on moral grounds. These issues will be addressed later in this chapter.

improvements in a majority of these risk factors and explicitly names carbohydrates as the underlying culprit for several conditions:

excessive carbohydrates play a role in a host of diseases and disorders, from diabetes and heart disease to allergies and hormonal imbalances such as polycystic ovary syndrome (Atkins Nutritionals Inc. 1999-2004g).

you can't prevent every breast cancer risk factor, but doing Atkins is the ideal way to control the ones you can: obesity, high insulin levels and consumption of healthy fats (Atkins Nutritionals Inc. 1999-2004h).

the controlled carbohydrate approach to weight loss is particularly effective in helping your blood pressure. When you follow the Atkins Nutritional Approach™, you lose weight steadily and easily on a diet that's naturally high in nutrients such as potassium and magnesium that have been shown to help reduce blood pressure (Atkins Nutritionals Inc. 1999-2004i).

It is not uncommon to find gallstones in people who are obese, although the gallstones may not be causing discomfort. People with existing stones may, however, have trouble with high-fat meals. If you are one of these people you may have to slowly increase the level of fat you eat according to your own tolerance—meaning, how you feel. Remember, gallstones are not formed overnight. So anyone who tells you they started doing Atkins and two weeks later developed gallstones doesn't fully understand the medical situation (Atkins Nutritionals Inc. 1999-2004m).

In summary, the Atkins website claims that obesity related risk factors are a direct result of a high carbohydrate diet. They claim that by losing weight on the Atkins Nutritional Approach the risk of these diseases is reduced not only because of general weight loss but also specifically because of the restricted intake of carbohydrates.

Other organizations claim the exact opposite and argue that the Atkins diet actually aggravates these conditions and related co-morbidities. Again, the most vocal opponents are the members of the PCRM and claim their website is a “resource for Physicians and

Laypeople with questions and concerns about High-Protein Diets” (PCRM 2004). They suggest that the Atkins diet can increase risk in other areas by causing or aggravating problems such as: Colorectal cancer, cardiovascular risk, renal disease, osteoporosis, and diabetes (PCRM 2004b) and also maintain that “proteins stimulate insulin release, just as carbohydrates do” (PCRM 2004c). The PCRM also critique the nutritional basis of the diet and suggest, “low-carbohydrate diets typically include quantities of cholesterol, fat, saturated fat, and protein that exceed the recommended safe limits set by the National Academy of Sciences⁸, and are often low in fiber and other important dietary constituents” (PCRM 2004b). The PCRM also notes the absence of studies on the long term effects of the Atkins diet and notes that short-term studies raise concerns for the following conditions: colon cancer, heart disease, impaired kidney function, complications of diabetes, osteoporosis and other minor conditions, such as constipation, headaches, bad breath, muscle cramps, diarrhea and general weakness (PCRM 2004b).

AtkinsExposed’s criticisms correspond with those of the PCRM and while the PCRM are more media savvy and vocal, AtkinsExposed offers the most comprehensive compilation of anti-Atkins arguments in both expert and lay web discourses. In addition to aggravating the above listed conditions, AtkinsExposed also cites studies that suggest ketogenic diets, like the Atkins diet, can cause cognitive impairment (AtkinsExposed 2004c) and impair emotional functioning by increasing the likelihood of irritability and depression, particularly in females (AtkinsExposed 2004d).

⁸ According to the organizations website, the National Academy of Sciences is an American organization that, in conjunction with the National Academy of Engineering, the Institute of Medicine and the National Research Council, “perform an unparalleled public service by bringing together committees of experts in all areas of scientific and technological endeavor. These experts serve pro bono to address critical national issues and give advice to the federal government and public” (National Academy of Sciences 2005).

Like the official Atkins website, the PCRM and AtkinsExposed ground their claims in scientific evidence-based studies and make their references available to web users. The PCRM and AtkinsExposed cite other 'experts' including: the American Cancer Society (American Cancer Society, Inc. 2005), the American Dietetic Association (ADA 2005), the American Heart Association (American Heart Association, Inc. 2005) and the American Medical Association (American Medical Association 1995-2005). By presenting secondary evidence from established medical organization, the websites can piggyback on the professionally legitimated expertise of these organizations.

Along with the Australian Medical Association, a majority of medical associations criticize the Atkins diet and many of its claims to safety and long-term effectiveness:

The success of the Atkins diet for weight loss and its impact on health are largely unknown beyond 12 months. The diet is difficult to stick to, and is very different to the average Australian food intake. The authors say the diet could have an adverse affect on cardiovascular disease, kidney function and bone health (Australian Medical Association 1995-2003).

Zelman added: "In the short term, these studies show you can achieve weight loss with low-carb diets. But in the long term, success rates were not different from people who are on a more 'traditional' diet. These results don't change ADA's recommendations for achieving healthful weight that can be sustained over a lifetime."...ADA's advice is based on the National Academy of Sciences' recommendations that adults obtain 45 percent to 65 percent of their calories from carbohydrates, 20 percent to 35 percent from fat and 10 percent to 35 percent from protein (ADA 2003).

The rationale advanced to justify the diet is, for the most part, without scientific merit. Furthermore, no evidence is advanced that controlled studies were ever carried out to validate the observation that weight can be lost by sedentary subjects who consume a carbohydrate-poor diet providing 5,000 kcal/day...Any grossly unbalanced diet, particularly one which interdicts the 45% of calories that is usually consumed as carbohydrates, is likely to induce some anorexia and weight reduction if the subject is willing to persevere in following

such a bizarre regimen. However, it is unlikely that such a diet can provide a practicable basis for long-term weight reduction or maintenance, ie, a life-time change in eating and exercise habits...Bizarre concepts of nutrition and dieting should not be promoted to the public as if they were established scientific principles. If appropriate precautions are not taken, information about nutrition and diet that is not only misleading but potentially dangerous to health will continue to be conveyed to the public (Weight 1973 for AMA).

Like other groups, the medical associations do not contest the effectiveness of the diet in the short term but are concerned with the potential health risks, unknown long-term consequences and the balance of nutrition. The medical associations provide a starting point and established body of evidence for any group making claims to counter the official Atkins literature.

In addition to these health risks, the PCRM also warns that physicians who prescribe this diet may be at risk for legal liability in cases of Atkins related health problems and morbidity (PCRM 2004d). Therefore, while there appears to be consensus among medical experts about the risks of obesity and the benefits of weight loss, there is a large amount of contestation concerning the risks associated with various methods of weight reduction. This causes conflict and confusion for the individual dieter. The lay dieter is also expected to consult medical experts before beginning a weight loss regime, but in the face of conflicting expertise on the safety of the Atkins diet, the lay dieter is also largely left alone to navigate expert and lay discourses on this approach. Internet users considering the Atkins diet are faced with the daunting task of sorting through mounds of conflicting web based information, should they adopt responsibility for their own health and well-being. The *responsible lay expert* (Novas and Rose 2000) must also confront his or her personal physician with their educated decision and face potential opposition. With the proliferation of competing risk-

based claims surrounding the Atkins diet, claimsmakers must construct legitimacy for their emergent expertise if responsible lay dieters are to be convinced of their position. The next section investigates how emergent diet experts make claims to expertise and construct legitimacy accordingly.

Claims to Expertise and the Construction of Legitimacy

As described above, there is much conflict regarding the safety, effectiveness and general appropriateness of the Atkins diet. Competing claims are rampant in the staggering amount of web resources available for public consumption. However, as noted by Hardey (1999) and Nettleton (2004), the quality of information available on the Internet is variable and medical organizations and physicians have trouble regarding web resources as reliable sources without legitimated accreditation. Hardey states,

the equity of presentation offered by the Internet dissolves the boundaries around areas of expertise upon which the professions derived much of their power. Furthermore the illusion of authority given to computer-mediated material may benefit non-orthodox medicine which lacks the symbols of power and authority routinely available to orthodox medicine (Saks 1992)...The issue of quality can be used to illustrate how lay users define and cope with the problem and the way it is used by the medical profession to attempt to retain and redefine boundaries around medical expertise (Hardey 1999:827).

Both Hardey and Nettleton go on to address issues prominent in this problem area. Specifically, they address notions of bounded expertise and how the Internet allows people to challenge professional medical expertise.

While many of the key players in the Atkins debate have roots in the medical profession, the most vocal web based resources and organizations emerge as self-styled

experts and construct their legitimacy and authority decidedly outside the boundaries of the medical profession. The involvement of official medical associations such as the American and Australian Medical Associations in web based debates represents efforts by the medical community at reappropriating their expertise in cyberspace. Meanwhile, non-official medical organizations, such as the Atkins site and PETA, represent the debounded expertise that Hardey (1999) and Nettleton (2004) see happening in cyberspace. These sites and others, despite sometimes having appropriate credentials, construct their expertise, legitimacy and authority through a variety of techniques that will be addressed below, whereas official medical organizations appear content to rest on their credentials. Neo-liberal subjects who assume responsibility for their health by accessing online health information are faced with the task of sifting through the massive amount of web discourses regarding the Atkins diet.

Because the Internet is an example of a more egalitarian medium, information can be produced by any person with Internet access, expert or layperson. Therefore, partnering with web users is achieved and maintained through legitimating claims to expertise in cyberspace. For non-official medical organizations, expertise and legitimacy are constructed in several ways: the use of references to scientific evidence, addressing responsibility and liability, and discounting opponents. Six competing websites and their producers are examined in this respect: the Atkins Nutritional ApproachTM, PCRM, AtkinsExposed, the Omnivore, PETA and Quackwatch⁹.

⁹ Although the PETA and Quackwatch sites are important players in the Atkins debate, it should be noted that they do not focus solely on low-carbohydrate dieting, as the others do. PETA is mainly concerned with vegan and vegetarian lifestyles and lobbying for more ethical treatment of animals in all aspects of life, while Quackwatch is mainly concerned with debunking phony medicine and exposing health fraud.

Science and Evidence

While expertise has often been associated with traditional scientific expertise in social theory, a simple model of lay dependence on expertise is no longer tenable. However, the construction of informal and non-traditional forms of expertise often involves the presentation of scientific evidence to support claims. In health and medicine, with specific regard to the Atkins diet, contradicting scientific evidence is prevalent. Thus the presentation of scientific evidence to support claims may establish a level of perceived legitimacy and credibility associated with quantitative evidence. However, one must still buy into such claims in order to form health partnerships with emerging experts. In other words, individuals do not always consider scientific evidence based on purely rational or objective considerations; they also make decisions based on their perceptions of what is healthy for them and what claims resonate with these perceptions.

The presentation of scientific evidence is the most formal means of constructing legitimacy for the websites' various expert claims. By providing links to various studies, journal articles and medical organizations' websites, emergent diet experts suggest uncontestable validation in their claims for their position and against their opponents' positions. Most of the websites in the Atkins debate portray themselves as a resource to educate the public, which connotes an image of neutrality. The main page of the PCRM announces their site as a "resource for Physicians and Laypeople with questions and concerns about High-Protein Diets" (PCRM 2004). In a similar style, Quackwatch claims itself as "a nonprofit corporation whose purpose is to combat health-related frauds, myths, fads, and fallacies. Its primary focus is on quackery-related information that is difficult or impossible to get elsewhere" (Barrett 2005a) and boasts a slogan stating "Quackwatch: Your Guide to

Quackery, Health Fraud, and Intelligent Decisions” (Barrett 2005). The official Atkins site, in addition to hosting a wealth of information on the diet itself, devotes a majority of its resources to proving the safety and effectiveness of the diet through research summaries and commentary (Atkins Nutritionals Inc. 1999-2004n). It also provides sections that ‘debunk myths’ (Atkins Nutritionals Inc. 1999-2004j) and serves as a resource to educate personal physicians¹⁰ (Atkins Nutritionals Inc. 1999-2004o). The AtkinsExposed website contains a comprehensive list of organizations (AtkinsExposed 2004e) and studies that challenge all aspects of the Atkins diet (AtkinsExposed 2004f), while PETA (2005) and the Omnivore websites (Colpo 2003-2004) provide information through editorials that set an agenda that is not always based in scientific studies.

The official Atkins website lists summaries and commentaries on more than one-hundred studies from respected journals, media sources and organizations in their ‘Latest Research’ section (Atkins Nutritionals Inc. 1999-2004p). Summaries are written by people outside the Atkins circle while commentaries are written by Atkins ‘professionals’. The resources provide information on a wide range of topics, including: low-carbohydrate diets, blood glucose, diabetes, activity, cancer and other major health issues. Not all are specifically related to the Atkins diet and prominent organizations and journals are represented, including: The Journal of the American Medical Association (JAMA 2005), the British Medical Journal (BMJ 2005) and the New England Journal of Medicine (Massachusetts Medical Society 2005).

Both the PCRM and AtkinsExposed refer to scientific studies that attack either the effectiveness or safety of the Atkins diet, but most often employ media articles or press

¹⁰ During the course of this research project, this particular section of www.atkins.com has been removed at an unknown date in the year 2005.

releases by organizations denouncing the Atkins diet for various reasons. The PCRM cites less than ten links to organizations against the Atkins diet, while AtkinsExposed lists thirty-eight ‘expert’ resources and well over one thousand citations within their textual commentary on the safety and effectiveness of the diet. Referenced organizations include: the American Cancer Society (American Cancer Society, Inc. 2005), the American Dietetic Association (ADA 2005), the American Heart Association (American Heart Association, Inc. 2005), the American Medical Association (American Medical Association 1995-2005) and Dr. Dean Ornish (2004), who has become somewhat of an institution in anti-Atkins discourse. Several similarities exist when comparing the official Atkins site, the PCRM and AtkinsExposed sites. They all make references to specific studies that are not easily accessible for laypersons. They employ summaries and other supposedly bias free means of manipulating resources to prove their position and discount their opponents. And, ironically, specific organizations and studies appear to validate research both for and against the diet, depending on whose site you visit.

In his organization’s (Quackwatch) effort to expose health related fraud, Dr. Stephen Barrett addresses issues surrounding the Atkins diet and attempts to ‘objectively’ examine the scientific evidence regarding low-carbohydrate diets in general (Barrett 2005b). While Dr. Barrett claims to utilize a more balanced approach to presenting evidence on this topic, it becomes evident that he is uncomfortable with the diet and several issues and agendas it represents:

although short-range studies have found that low-carbohydrate diets can produce weight loss, no study has demonstrated that such diets are safe or effective for long-term use [Fumento 2002, AHA 2002, Bravata et al. 2003, Foster et al. 2003, Blackburn 2002, Westman and Volek 2002]. Atkins advocated his diet for more than 30 years and stated that more than

60,000 patients treated at his center had used his diet as their primary protocol. However, he never published any study in which people who used his program were monitored over a period of several years. The recent popularity of low-carbohydrate diets has encouraged food companies to market low-carbohydrate foods for people who want to "watch their carbs." Most of these foods are much higher in fat than the foods they are designed to replace. I believe that "low-carb" advertising is encouraging both dieters and nondieters to eat high-fat foods, which is exactly the opposite of what medical and nutrition authorities have been urging for decades. Following a low-carbohydrate diet under medical supervision may make sense for some people, but a population-wide increase in fat consumption is a recipe for disaster (Barrett 2005b).

Dr. Barrett deals with a wide variety of issues in the Atkins debate and cites a variety of respected sources within his text. However, his citations are often incomplete, but are more accessible to lay people, as they often come from online resources and are linked directly from the Quackwatch articles.

PETA deals less specifically with scientific evidence and sets its argument more in terms of general obesity problems and their own moral agenda. The home page for their section titled 'The Obesity Epidemic' explicitly blames meat consumption for rising obesity rates:

It's really that simple: Meat-eaters are fatter. The only regimen that's been proved to take weight off and keep it off is a low-fat vegan diet. Obesity is one of the most pressing health problems in the U.S. and will soon become the country's leading cause of preventable deaths. Despite the growing number of "diets" that are being touted throughout the country, Americans just keep getting fatter (PETA 2005a).

Although they do quote several medical organizations, including the American Heart Association and the American Dietetic Association, they primarily rely on the sites of others to justify and substantiate their medical claims regarding the Atkins diet, providing links

instead of citations. Their primary sources include the PCRM, Dr. Dean Ornish and other pro-vegetarian websites, such as VegSource (2005). By directing users to websites that specifically engage with medical studies about the Atkins diet, PETA indirectly supports their claims regarding the diet without including many citations on their own website. PETA's section on the Atkins diet is mainly a comparison of the risks of the Atkins diet and the benefits of a vegan alternative (PETA 2005b) that relies heavily on evidence provided by other websites and organization.

The Omnivore site, run by Anthony Colpo, also sets a clear agenda and provides scathing commentary on a variety of medical issues surrounding low-carbohydrate diets inline with his favoured diet, the Paleolithic Principle¹¹. On the main page of his website, Colpo unapologetically announces himself as the foremost expert on truth when it comes to health and diet:

Anthony Colpo knows that most of what passes for accepted diet and health wisdom is complete nonsense--and he's got the research to back up his claims... Every assertion made above is backed by solid evidence published in the world's most prestigious medical and dietetic journals... You haven't been told about this conflicting evidence because the extremely powerful food and drug industries, and the supposedly 'impartial' and 'respectable' health organizations they finance, don't want you to know about it! The cold, hard truth is that their continued profitability is of far more concern to them than your health! An enlightened consumer, as opposed to a brainwashed one, is the last thing they want... Virtually all of us, however, can make relatively simple modifications to our diets and lifestyles that reflect the evolutionary requirements of our genome. The purpose of this web site is to help you rediscover what those requirements are, and to dispel many of the scientifically untenable myths perpetuated by modern-day health "experts"... Most of what you've been told about health and nutrition is plain WRONG! (Colpo 2003-2004).

¹¹ The Paleolithic Diet is a way of eating that mimics eating habits of the Stone Age's hunter-gatherer lifestyle (Helwig 2005, WebMDHealth 1996-2004c)

Colpo engages with scientific studies; however, his site consists largely of self-authored articles that resemble editorial journalism more than the other websites. Thus, he claims to be armed with mountains of evidence and can argue accordingly but does not always cite and substantiate his claims within his text.

The massive lists of available references are impressive on all sites; however, links to many referenced studies are often not available to the lay web user, making specific studies inaccessible without membership to a specific journal or organization with access to the journals. While hyperspace has the potential to link references quite easily, many of the websites make it difficult to obtain citations and references. This allows the emergent web experts the ability to mediate expertise. While the organizations can engage with medical studies and utilize them to support their claims, lay persons cannot always engage directly with these same studies, which forces them to rely on their own judgment when assessing the credibility of what is being claimed. Limiting direct access to medical studies enforces some boundaries around traditional scientific evidence but still allows the lay web user an indirect means of engaging with the evidence. However, by making it difficult for the average web user to access referenced material, the websites are maintaining a distance between laypeople and traditional expertise. This allows their claims to appear substantiated without actually providing accessible formal evidence. This mediation of knowledge forces a quasi-dependency where lay Internet users can still engage with alternative health claims in a meaningful way but still must place a certain level of faith in an organization's claims unless they are willing to make the effort required to access the evidence directly.

Responsibility and Liability

The issues of responsibility and liability are most evident in three sites: the Official Atkins site, the PCRM and AtkinsExposed. Both the Atkins and PCRM websites explicitly attack one another's scientific basis and present themselves as an authoritative expert on their subject but defer to physicians as the dominant form of expertise on weight loss. This is evident in each site's medical disclaimer:

The instructions and advice presented on this website are in no way intended as medical advice or as a substitute for medical counseling. The information should be used in conjunction with the guidance and care of your physician. Consult your physician before beginning this program as you would any weight loss or weight maintenance program. Your physician should be aware of all medical conditions that you may have as well as the medications and supplements you are taking. Those of you on diuretics or diabetes medication should proceed only under a doctor's supervision. As with any plan, the weight loss phases of this nutritional plan should not be used by patients on dialysis or by pregnant or nursing women. If you're considering adopting the Atkins Nutritional Approach™, please read our Medical Cautions (Atkins Nutritionals, Inc 1999-2004q).

The site does not provide medical or legal advice. This Web site is for information purposes only. Viewing this site, receipt of information contained on this site, or the transmission of information from or to this site does not constitute a physician-patient or attorney-client relationship. The medical and/or nutritional information on this site is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay seeking it because of something you have read on this Web site. The legal information on this site is not intended to be a substitute for professional legal advice. If you need legal advice for your specific problem, you should consult a licensed attorney in your area (PCRM 2004e).

Although both sites disclaim their expertise, and defer to other medical ‘experts’, they also go on to offer ‘objective’ scientific research in support of their position. Monica Greco (1993), discussing this general feature of the media, argues that: “the media, unlike medicine, have no curative power. They can inform for purposes of prevention, but they cannot assume responsibility for intervention. One must still ‘abdicate judgment’ before the authority of knowledge” (1993:369). Despite this apparent limitation, the sites actively endorse lay intervention with expertise, suggesting a shift in what constitutes ‘the authority of knowledge’. While each site offers a section that ‘debunks myths’ about the Atkins diet, the section in the Atkins website offers a unique page titled ‘How to Convince your Doctor’, which offers the following advice on consulting your ‘expert’ physician:

After learning about Atkins, you've decided to follow it to lose weight and deal with your health problems. You've explained your decision carefully to your friends and family and gotten their support. Now you have just one more person to convince: your doctor...Chances are your physician has heard only half-truths and myths about Atkins, and has never really looked at the scientific basis for the program. It's up to you as the patient to be proactive and provide the evidence to overcome your doctor's objections. Here's what you're likely to hear and how you can respond...Is this an impossible task? Not really, although you may have to educate your health-care provider a bit about exactly what's involved in doing Atkins. And although many doctors still have a knee-jerk anti-Atkins reaction, many others have come to see just how effective the Atkins Nutritional Approach™ is and will support your decision.

Beyond the Myths

Once you've cleared up some misconceptions about doing Atkins, it's time to provide your doctor with some solid scientific studies that support its underlying principles. There are far too many of these to give a complete list here, but ask your doctor to check out the particularly important studies listed at the end of this article. Also visit *The Science Behind Atkins*¹² (Atkins Nutritionals, Inc 1999-2004o).

¹² As stated earlier, this section of www.atkins.com is no longer accessible.

After officially disclaiming their expertise and attempting to minimize their own responsibility, the Atkins site then goes on to exert their 'informal' expertise on the safety of their diet by suggesting methods of educating the same experts that they defer to. By suggesting that physicians need to be educated by informed patients, the Atkins site is again attempting to mediate expertise and challenge traditional notions of expert-lay relations.

These examples are very much in accordance with the neo-liberal shift of responsabilization. Websites achieve two ends through medical disclaimers. Firstly, they shift responsibility back onto the individual. It becomes the individual's problem to convince their doctor and obtain medical approval for their diet regime, which then makes the patient's medical well-being the physician's responsibility. Secondly, this shift of responsibility enables a decrease in legal liability for the websites. However, all this appears to be lip service or obligatory risk management as the websites constantly make claims to expertise in dieting and obesity and construct a level of legitimacy and credibility accordingly. Although they officially defer responsibility to the expert physician, it is also clear that they assume their position is unflawed and thus an acceptable choice for all. This repeated deferral to professional expertise, with simultaneous construction of expertise complicates relations of their own expertise and places the subject in a fairly unstable position within the relationship.

The AtkinsExposed website displays a different kind of disclaimer and does not address doctor-patient relationships or defer responsibility in any explicit way. Its disclaimer reads: "This site is not affiliated with, sponsored by, or related in any way to Atkins Nutritionals, Inc. If you would like to visit their site, please use the following link: www.atkins.com" (AtkinsExposed 2004). The AtkinsExposed website's disclaimer serves to

decrease their legal liability; however, their concerns lie with Atkins instigated litigation as opposed to personal lawsuits. As noted already, prior to obtaining the www.atkinsexposed.org domain name, AtkinsExposed was known as www.atkinsfacts.org but was contacted by the Atkins Corporation with the threat of litigation. AtkinsExposed addresses the issue: “This website allegedly "impinges on Atkins' rights." AtkinsFacts.org's "defamatory" statements, according to the Atkins Corporation, "continue to harm Atkins' reputation and cause injury to Atkins... Thankfully, under law the truth is considered an absolute defense against defamation” (AtkinsExposed 2004g). Although the Atkins organization framed their threat of litigation in terms of trademark infringement, their main opposition concerns negative statements made about the Atkins diet that they believe to be misleading to the public (AtkinsExposed 2004i). The Atkins organization was concerned that the public would mistakenly find the AtkinsFacts website while searching for the Atkins site and be misinformed by the contradictory health claims (AtkinsExposed 2004i). Despite listing rebuttals to the Atkins claims against him, AtkinsExposed creator, Dr. Michael Greger, still saw fit to change both the domain and organizational name in an effort to stave off litigation.

Only once, does Dr. Greger come close to explicitly addressing individual responsibility. After rebutting the Atkins claims, he challenges the reader: “Please feel free to read the best defense the Atkins Corporation could come up with to try to counter the truth and make up your own mind” (AtkinsExposed 2004g). Dr. Greger, and his AtkinsExposed website, do not officially assume or disclaim responsibility and portray their information as a balanced source. In doing so, the individual web consumer is inherently delegated responsibility, but is expected to take on the model behaviour of Novas and Rose’s (2000)

responsible lay expert by educating themselves with both sides and then making up their own mind.

The websites operated by PETA, the Omnivore and Quackwatch are less inclined to employ disclaimers and do not explicitly defer expertise. PETA actually asserts their expertise by claiming their position as the healthiest but does defer responsibility latently by directing their diet concerned web visitors to the PCRM website (PETA 2005a).

As noted above, Anthony Colpo, organizer of the Omnivore website, straightforwardly claims complete expertise when it comes to health and nutrition and suggests traditional experts, such as physicians, are plain wrong, unless they are in line with his way of thinking. The Omnivore does not defer to other experts in any sort of disclaimer. Instead, Colpo does assume responsibility for educating the public on his position (Colpo 2003-2004). On his main web page, Colpo states that the purpose of his website is “to dispel many of the scientifically untenable myths perpetuated by modern-day health ‘experts’” (Colpo 2003-2004) and later elaborates on this goal in a site titled ‘So who is this Omnivore guy, anyway?’:

The purpose of my website is to help people realize that the bulk of what constitutes mainstream dietary wisdom has little foundation in scientific reality. I was fooled by such 'wisdom' during the nineties, and my health began to suffer as a consequence. If I can help even a small portion of the folks out there who have been similarly suckered by the low-fat propaganda to discover the facts, to discover a way of eating that might truly benefit their health, then I feel my efforts in establishing and running this site will have been well worth the effort (Colpo 2003-2004e).

In line with responsabilization, his goal is an ‘enlightened consumer’, one capable of exploring the literature and making their own decisions without interaction with traditional health experts.

Quackwatch also does not include any sort of medical disclaimer, but constructs itself as a medical based authoritative expert on health issues. In its mission statement, Dr. Barrett lists their activities as “Investigating questionable claims, Answering inquiries about products and services, Advising quackery victims, Distributing reliable publications, Reporting illegal marketing, Assisting or generating consumer-protection lawsuits, Improving the quality of health information on the Internet, Attacking misleading advertising on the Internet” (Barrett 2005a). As an organization dedicated to finding and discounting what they view as faulty and fraudulent medical claims¹³, Quackwatch assumes the responsibility to inform the public about fraudulent health concerns but does not issue prescriptive measures as the other websites do, which may explain their reluctance to defer expertise. They portray themselves as a resource as well, which indicates their desire for enlightened, responsible consumers, well versed in health information. However, with that said, their wish for responsible lay experts only includes those who follow quite traditional forms of medical science with little to no room for alternative methods.

By employing disclaimers and placing responsibility on individual web users and their respective physicians, the sites can disclaim responsibility and legal liability and still construct their expertise and portray their claims as authoritative and legitimate. By shifting responsibility, they can maintain a position as an educational resource backed by science. This allows the possibility of emergent diet experts. An emergent diet expert, such as the Atkins organization, should not be confused with traditional modes of expertise, such as the Quackwatch organization that constructs its expertise more in terms of professional

¹³ This is stated directly in their mission statement, which has been quoted previously, but states that Quackwatch is “a nonprofit corporation whose purpose is to combat health-related frauds, myths, fads, and fallacies. Its primary focus is on quackery-related information that is difficult or impossible to get elsewhere” (Barrett 2005a)

medicine. Instead, the emergent diet expert occupies a mediated position in terms of expert-lay relations, where organizations construct expertise without accepting responsibility.

Discounting Opponents

Another prevalent method of supporting claims involves discounting dissenting viewpoints from opponents. All websites engage with their opposing counterpart and make an effort to effectively dismiss competing claims. The least stridently vocal in this regard are the official Atkins website and Quackwatch. The Omnivore, AtkinsExposed, PETA and the PCRM all exert a more considerable amount direct, and often unkind, attacks against the claims made by their opponents.

Quackwatch proclaims its mission to be combating health fraud and ‘quackery’, particularly that occurring through the Internet (Barrett 2005a). Because Quackwatch is an organization that reviews and discounts instances of ‘health fraud and quackery’, the presence of an article discussing the Atkins diet on their website suggests that the Quackwatch organization is concerned with the validity and safety of such a diet. Therefore, the Quackwatch site expresses their disdain for the diet through general methods. They officially examine low-carb diets in general, but then go on to address specific issues about the Atkins diet and Dr. Atkins. The site attempts a neutral account of certain controversies surrounding the Atkins diet by discussing opposing and supportive views on topics ranging from effectiveness and safety to the ambiguous facts about Dr. Atkins’ own health and death (Barrett 2005b). However impartial they intend to be, Dr. Barrett’s thoughts on the diet are evident when he questions outright the health of Dr. Atkins himself: “Some day, perhaps, the Atkins organization will explain how [Dr. Atkins] could have progression of coronary

disease that he didn't have in a cardiovascular system that was 'extraordinarily healthy'" (Barrett 2005b). While Dr. Barrett, through Quackwatch, keeps the finger pointing to a minimum, he also shows an alliance with parallel critics through a link to AtkinsExposed in the same article. Despite self-styled attempts at a neutral portrayal of 'facts', Dr. Barrett inevitably does not avoid addressing Atkins' claims directly.

Alternatively, the Atkins site only addresses the PCRM with respect to their involvement in a lawsuit against the Atkins Corporation by Jody Gorran. Gorran is "a 53-year-old businessman [who] is suing Atkins Nutritionals, Inc. and the estate of Robert C. Atkins, M.D., for negligent misrepresentation, product liability, and deceptive and unfair trade practices" (Quackwatch 2005) and has filed his lawsuit in conjunction with the PCRM and their legal team. The Atkins website had this response to what they claim is a 'frivolous lawsuit':

Why does anyone take PCRM seriously and allow this group, with its animal rights agenda¹⁴, to divert us all from the real crisis: the obesity and diabetes epidemics in this country? Why is PCRM, which despite its name, can reportedly claim less than 5 percent of its membership as actual physicians, even viewed as a legitimate participant in the nutrition debate? Shouldn't the nutrition discussion be focused on science?¹⁵
(Atkins Nutritionals, Inc 1999-2004r)

Like the other websites, the Atkins site starts off with dismissing a dissenting viewpoint based solely on a group's agenda. As already established, all the websites engage with science and evidence to support their claims but also attack the basis of each other's evidence in non-evidence based ways. A situation emerges where the validity and legitimacy of

¹⁴ It should be noted that the PCRM and PETA are two separate groups with two separate agendas. Although they are often criticized together because of their supportive relationship and shared concern for animal rights, they are two distinct organizations.

¹⁵ During the course of this research project, this particular section of www.atkins.com has been removed at an unknown after August 12th, 2005.

published scientific studies becomes tied up with the groups' agendas as opposed to the scientific merit of the proposed evidence.

The PCRM's disdain for the Atkins diet and Dr. Atkins is evident from a quick glance at their main page. Along with a short introduction about the group and their purpose, links include titles such as *Atkins Lawsuit Update*, *What's Wrong with Atkins?* and *Hurt by an Atkins-type diet?* (PCRM 2004). These links lead to updates on the litigation brought forward by Jody Gorran and the PCRM, present scientific evidence against the diet, debunk alleged myths and provide a recruitment form for people who have suffered health consequences of the Atkins diet and other low-carbohydrate diets. The PCRM also provide links to their press releases (PCRM 2004f) and personal stories about individuals' problems with the diet (PCRM 2004g). These two areas contain the bulk of the negative comments on the Atkins diet.

The section containing personal stories is unique as it is one of the rare displays of lay testimony on any of the websites. By displaying non-member stories and opinions, the PCRM can attack Atkins indirectly and still maintain a certain degree of 'professionalism' on their website by not directly engaging in a war of insults. The following selections discuss Dr. Atkins and a perceived betrayal felt by the individuals involved:

I'd just like to say that Dr. Atkins gained her trust and then turned right around and betrayed it – Paul (the father of a deceased child; allegedly as a result of a high protein diet) (PCRM 2004h).

Well, a comment that I'd like to make is that maybe we can't sit here and prove today that it's the Atkins diet that is causing deaths, but I think that people need to be aware of the dangers associated with a diet like that and the possibility that they could die. I mean, I think that that's the most important thing. When I talk to people, all they care about is losing weight. They're not thinking about their health. They think that they're

helping their health by losing weight, by eating this high-fat food and mass quantities of meat and cheese and things like that. I mean, just logically, it doesn't make sense – Mari (PCRM 2004i).

All subjects discuss their experience in terms of lacking expert knowledge about the safety of the Atkins diet¹⁶. By displaying emotional, experiential lay testimony the PCRM also engage in a means of discounting Atkins outside the scientific debate, providing further evidence that constructing expertise and discounting expertise are not always processes of providing the most objective evidence-based form of fact, which is how the websites often frame their debate and try to determine some kind of ‘truth’¹⁷.

In their Press Release section, no punches are spared and strong accusations against Dr. Atkins and his corporation are present; however, in this section, it is often the voice of PCRM members that are heard, including their senior lawyer in this press release regarding litigation and the controversial circumstances of Dr. Atkins’ death:

“Atkins’ conspiracy of silence is about to crack wide open,” said Dan Kinburn, Gorran’s lead attorney and senior counsel for the Physicians Committee for Responsible Medicine. “We contend that Atkins has known for years, if not decades, that the regimen poses a real danger to significant numbers of dieters and has suppressed that information for commercial gain.”

Among the information requested in discovery, said Kinburn, are the complete medical records of the late Dr. Robert Atkins, inventor of the Atkins Diet. Atkins died in April 2003 in a fall outside his New York offices. Medical records taken by the NY medical examiners office show that Atkins was overweight

¹⁶ While examples of personal testimony on the Atkins website exist, they focus their discussion on success stories and are not as well featured as those on the PCRM site.

¹⁷ I am not arguing that truth claims of ‘objective evidence-based forms of fact’ are determinants of fact; instead, I am questioning these and their position in professional and traditional views of expertise. However, I am arguing that claimmaking web based forums still value these ‘objective evidence-based forms of fact’ and often construct expertise through related evidence, which makes it interesting that these same web sites are also very willing to step outside the scientific arena to attack their opponents on other levels.

at the time of his death, tipping the scales at nearly 260 pounds, and may have had cardiovascular disease (PCRM 2004j).

In this short press release, and others like it, the PCRM explicitly accuse Dr. Atkins and his corporation of conspiracy. If there was any doubt at all as to the intentions of the PCRM to combat Atkins as well as maintain their expert status, the group also provides a variety of advertisement campaigns (PCRM 2004k) and an anti-Atkins manifesto (ChangeThis 2004). Despite having presented considerable amounts of scientific evidence to support their position, the PCRM has also strengthened their attack on everything Atkins by employing experiential 'evidence' outside the scientific debate.

The AtkinsExposed website utilizes a similar formula to the PCRM's site, by citing other sources who explicitly attack the Atkins diet and Dr. Atkins, such as the American Dietetic Association (ADA 2005) and Frederick J. Stare, chair of Harvard University's Nutrition Department (AtkinsExposed 2004). However, unlike the PCRM, AtkinsExposed does not employ lay testimony, nor do they recruit individual claims for litigation purposes. Where the PCRM is a group actively involved in dismissing the Atkins diet, AtkinsExposed is run primarily by Dr. Greger, an individual physician, and fueled by his concern for public health (AtkinsExposed 2004h). However, Dr. Greger also attacks specific scientific evidence used by the Atkins corporation to support the alleged medical validity of the Atkins diet. He accuses the Atkins website of displaying only a small selection of supporting studies from a much larger pool of studies against the diet and then goes on to compare them to a major tobacco manufacturer:

Thirty-four studies is your "overwhelming weight of evidence"? There are literally hundreds of published reports on low-carbohydrate diets, [Bravata et al. 2003] and you can only find 34 that support your position?... Just because the Philip

Morris Corporation can wave around more than a hundred [Baron 1996] studies showing health benefits from smoking, this doesn't mean that smoking is good for you. What it means is that one can cherry-pick data to argue almost any position. This is a classic tobacco corporation tactic. [Tobacco Documents Online 1999-2005] (AtkinsExposed2004g).

Additionally, Dr. Greger also cites claims that downplay the risks of asbestos and celebrate thalidomide (AtkinsExposed 2004g) and directly engages with the vast amount of competing claims emerging from neo-liberal contexts.

PETA, like the PCRM, is actively dedicated to the demise of the Atkins diet, as well as any other diets advocating meat consumption¹⁸. While the PCRM are more veiled about their support of Vegan diets, PETA is explicit about its position and supports the PCRM and their lawsuit through direct links on their main obesity related web page. Like PCRM and AtkinsExposed, PETA uses quotes from other 'experts' to attack Atkins directly. However, rather than addressing only the health concerns regarding the Atkins diet, PETA attacks the Atkins diet through comparisons with Vegan diets as healthy alternatives. In their discussion of Vegan vs. Atkins type diets, PETA quotes sources naming the diet as cruel: "some criticize this exclusively plant-based diet as extreme or draconian. Webster's dictionary defines draconian as 'inhumanely cruel.' A closer look reveals that 'extreme' or 'inhumanely cruel' describes not plant-based nutrition, but the consequences of our present Western diet" (PETA 2005b). PETA also stays outside the scientific debate by addressing the meat based Atkins diet in moralistic terms. They are explicit about their agenda and construct and maintain legitimacy based on their cause.

¹⁸ Although the PCRM does not directly advocate against meat consumption on their website, their research and initiatives promote low fat vegetarian and vegan diets and lobby against animal testing. The PCRM and PETA have obvious connections and are both interested in animal rights.

Lastly, Anthony Colpo, creator of *The Omnivore* (2003-2004), discounts both lay critics and opponents. In a correspondence section of the site, Colpo welcomes both praise and criticism, but cautions those wanting to contact him:

Reasoned exchange of ideas, both complimentary and dissenting, is an important part of furthering knowledge in a given area. Therefore, I have no problem with receiving discordant opinions, as long as they consist of intelligent arguments whose key points are backed by valid scientific evidence. Unfortunately, much of the dissenting opinion I receive does NOT fall into this category (Colpo 2003-2004a).

He then goes on to suggest that the majority of his correspondence comes from people who cite studies but do not read them:

I make the following request--if you are going to write to tell me I am wrong, can you please make sure you actually read the studies to which you refer before wasting my time with dissenting arguments? Hey, I am only human and always open to the possibility that I may have gotten something wrong, but that possibility is unlikely to be realized by people who are too lazy to read the research papers they cite... (2003-2004a)

Colpo accuses critics of 'intellectual sloppiness' but does not include any examples of dissenting opinion that are grounded in scientific research. Although he maintains that he is engaged with a 'reasoned exchange of ideas' (2003-2004a), nowhere on his site does he debate critics without discounting the merit of their evidence, agenda or ideals. By belittling lay critics, Colpo discourages the very exchange of ideas that he suggests.

Colpo also maintains that the majority of health professionals and traditional experts are wrong, and states such on several occasions:

Anthony Colpo knows that most of what passes for accepted diet and health wisdom is complete nonsense--and he's got the research to back up his claims! (2003-2004)

I have written extensively on *TheOmnivore* as to why most 'prestigious' health authorities are actually among the worst

possible sources of impartial and scientifically valid diet and health advice. (Colpo 2003-2004b)

In addition to attacking the expertise of most health and medical professionals, Colpo also addresses explicitly anti-low-carb groups, most notably the PCRM:

If certain journalists had bothered to investigate the PCRM's background, for instance, they would have had little difficulty in discovering that this group of so-called "physicians" is little more than a band of radical vegan activists with a long history of distorting facts in order to advance their agenda (Colpo 2003-2004).

The first of these comes to us courtesy of those sadly misguided anti-meat, vegan fanatics who call themselves the Physicians Committee for Responsible Medicine. After desperately searching for individuals who have allegedly experienced adverse reactions on the Atkins diet and are prepared to sue (the PCRM have an entire web site devoted to this caper), they finally found someone prepared to step up to the plate in the form of one Jody Gorran (Colpo 2003-2004).

The fact is that the PCRM is a rabid vegan activist group who are hell-bent on ridding every last trace of animal foods from our diets. Given that the runaway popularity of high-protein, low-carb diets makes this unlikely goal ever-more unobtainable, it is not surprising that the PCRM will do anything to discredit meat-heavy regimens like the Atkins diet. As their B.S.-laden string of scare-mongering press releases clearly shows, they are in no way above disseminating unsubstantiated, scientifically untenable claptrap in order to make their case (Colpo 2003-2004).

Like all of the other sites, Colpo attempts to obtain a certain amount of credibility by dismissing the opinion and evidence of his opponents. Colpo also addresses issues surrounding his lack of formal credentials, self-education and ideals about educating Internet users on health matters:

I had to laugh when one of my critics recently questioned my right to comment on health matters, pointing to my lack of formal qualifications (I became a certified fitness consultant in 1991, but have never studied at university). Over the last few

years, I have literally read thousands of journal articles. Judging by some of the scientifically untenable theories espoused by this particular critic, I would have to seriously question whether he has even read a portion of the articles I have.

I want people to read what I have to say, then decide for themselves whether what I write makes sense and whether it concurs with the empirical and scientific evidence. If people read what I write and blindly accept it at face value, I haven't succeeded in educating them

So how does one validate the nutritional and health information they receive? In the case of the information given on this website, the best way is to take the citations I give and obtain the full text studies for one's self.

One thing I have noticed is that people always seem to be looking for 'gurus' who can impart them the knowledge that they believe will make their lives that much better. However, to blindly trust someone on the basis of impressive-sounding credentials, a charismatic personality, the number of other people who believe said guru's teachings, or the amount of media attention given to said guru's claims is hardly an optimal way to acquire knowledge, no matter what the subject (Colpo 2003-2004e).

All of these exerts display Colpo's desire for 'enlightened consumers' and make clear that he has assumed responsibility for amassing expertise regarding health claims and encourages others to do the same. While Colpo certainly portrays himself as a self-styled expert, he is unique in that he pays no attention to traditional boundaries and constructs his legitimacy primarily by dismissing the views of other traditional and acclaimed experts in the health and diet fields. In some ways he is more of a medical critic than an emergent diet expert; however, he has also taken on the task of self-education as a means of assuming responsibility and amassing non-credentialed expertise.

Although these websites exhibit varying degrees of self-styled expertise, they all engage in some form of constructing expertise and legitimacy. Establishing a credible level of expertise is an important endeavor for emerging diet experts and other organizations involved in the debate over the Atkins diet, whether this expertise is based in professional credentials, experiential knowledge, moral agendas or other forms of authority. Maintaining legitimacy for their competing claims is necessary in gaining the trust of those individuals in search of diet expertise. The sites rely heavily on the weight of medical expert opinion, but only in so far as it supports their particular position. They portray their information as completely factual but defer liability to the individual's physician. Lastly, they all address other groups and sites and occasionally resort to insults in an effort to dismiss opposing viewpoints, with the exception of the official Atkins website in its latest incarnation.

Throughout all this, one idea emerges as truly important. The ways in which expertise is employed, constructed and portrayed are complex. All sites and groups claim to value and depend on traditional forms of expertise, such as scientific, evidence-based medical studies; however, science, morals and agendas are invariably linked in web discourses about the Atkins diet. Competing claims regarding the same subject can all be backed by some form of evidence and expertise; therefore, the construction of legitimacy for one's expertise is paramount. Because evidence can be utilized on either side of the Atkins debate, a group's agenda, ideals or morals make them vulnerable to attack. Ties to vegetarian groups or corporate interests become points that negate a body of scientific evidence and one's own science becomes better than their opponents based on merits outside of evidence. A situation presents itself where new diet experts emerge and construct legitimacy based on their particular body of evidence and their ability to dismiss their opponents' body of evidence.

The importance of the Internet to these processes should not be underestimated. The fluidity¹⁹ of the medium makes it an ideal place to establish one's expertise and to challenge that of others. Hyperlinks to other supporting sites and actual medical studies can be utilized to provide the user with immediate access thus strengthening the perceived legitimacy of one's claims. However, many sites utilize broken links or provide links to medical evidence that is inaccessible to many Internet users. By mediating expertise through inaccessibility, the emergent experts utilize evidence that is only accessible to members of specific journals or medical organizations.

Additionally, those individuals utilizing the Internet for health information have already exhibited features of responsibility. They are taking their health into their own hands by seeking out information online (Hardey 1999) and are likely more interested in achieving a meeting between experts²⁰ (Tuckett et al. 1985) as opposed to relying solely on the expertise of their personal physician. It is also possible that those seeking health advice on the Internet are not engaged with their physician at all and are taking sole responsibility for their weight loss process. Although many web message board users are seeking communities of support, many are engaging in debate about the Atkins diet and seeking to engage with information and inform others of their newly acquired knowledge. The next chapter will examine how web message board users negotiate competing claims regarding the Atkins diet, how new lay authorities emerge with their own particular brand of expertise and how the Internet becomes an important site to challenge traditional medical expertise outside the confines of the doctor-patient relationship.

¹⁹ I suggest that the Internet is 'fluid' because of the ease in which one can seamlessly access information from multiple sites with little physical effort on behalf of the user.

²⁰ Please see Chapter 1, pg 36-38 for a more detailed synopsis of this concept. In short, Tuckett et al. (1985) are referring to doctor-patient relationships where patients assume a more proactive, educated and engaged stance in the medical decision making process.

Chapter Three

'Challenging Medical Expertise'

According to Hardey (1999), “one of the central areas of debate in medical sociology concerns the nature of the relationship between those with medical expertise and their patients or clients” (1999:820). As argued, the increased popularity of using the Internet to access health related information is one trend that is making a significant impact on the doctor-patient relationship (Hardey 1999, Nettleton 2004, Carlile and Sefton 1998, Winker et al. 2000). Responsibilized patients seeking to engage with physician expertise in a more equitable and educated position are aided in this endeavor by the prevalence of accessible health information available through the Internet. Patients who access health information online engage with multiple sites of knowledge outside the confines of the doctor-patient relationship. They take on a proactive role in maintaining their personal health and well-being. Although the medical community recognizes the potential of electronic health (e-health), some medical organizations, most notably the American Medical Association, are concerned about the quality of information available online (Winker et al. 2000). While the AMA (Winker et al. 2000) is continuously revising its established guidelines to assess the quality of online health information, part of what is appealing about the Internet is the availability of alternative health claims. By making expert knowledge and competing claims accessible to the mass public (Hardey 1999:822), the Internet represents a unique medium that provides ample opportunity for educated lay challenges to professional expertise. This chapter explores how self-governing dieters negotiate competing health claims in message

board communities and how the emergence of lay expert authorities represents a serious challenge to professional expertise.

According to Chen and Gaines (1996), “the Internet is a mixed community of publications and intelligent human agents that both stores knowledge and generates it on demand. When the information needed cannot be found through retrieval then it may be requested through discourse” (1996). The Internet has been embraced by many organizations and people related to health and medicine. Online support groups, organized by both medical groups and patients, exist for a staggering number of medical conditions. The Internet becomes a space where experts, laypersons, and all hybrid representations in between, can interact and trade knowledge. One popular feature of the Internet often utilized by support groups is the online message board¹, which provides ample opportunity to examine these methods of generating, utilizing and contesting both expert and lay knowledge.

Internet Message Boards and the Atkins diet

Online message boards provide web space for users to post thoughts and questions, share resources and conduct conversation in online public domains and represent an important form of web-based discourse. Users can post an original message that begins a ‘thread’ on a specific topic, post a reply to existing threads or simply read the messages without ever interacting with other users. Anonymity is possible and most users utilize online pseudonyms; however, they often use their first name within posted messages and share deeply personal information in the same setting. Message boards allow for the creation of online communities where members or users are not bounded by geography or time, only by common interest. Because competing claims to Atkins expertise are so prevalent online,

¹ Web message boards are also commonly referred to as bulletin boards or discussion boards.

Atkins related message boards are a fruitful place to explore the ways self-governing dieters engage with expertise and lay knowledge while managing potential health risks and competing claims about the diet.

A quick search through the Google (2005) search engine with the phrase ‘Atkins diet’ produces more than two million web pages, while a similar search for ‘Atkins diet Message Board’ produces almost one thousand web pages. Many of these websites are not directly relevant to this project; however, there is still a vast number of Atkins related message boards in cyberspace that are potentially relevant to this project. A small sample of the most popular message boards has been drawn from this simple search technique with certain criteria in mind. To be included in this sample, the message boards must be updated frequently, contain a sizable quantity of members/users and message threads and address topics relevant to the project. Additionally, popular message boards produced by any of the organizations mentioned in the previous chapter and dedicated specifically to low-carb discussion have been included in the sample. While many boards fit the criteria, a small sample of six message boards has been drawn from the most popular message boards provided from a Google search. The boards were chosen based on their relevance to the overall topic, popularity among message board users and the above listed criteria.

Although the sample is relatively small in terms of number of individual message boards, the amount of garnered data (several thousand individual messages) is substantial and has provided a variety of rich emergent categories and themes to examine. It should be noted that none of the message boards included in this sample maintain a large number of anti-Atkins members². An extensive search did not produce any popular message board that

² It should be noted that since this is a qualitative study, I could only estimate the percentage of anti-Atkins members for these boards. I would estimate that the percentage of both anti-Atkins members and anti-Atkins

focuses solely on the negatives about the Atkins diet. However, many of the boards frequently feature anti-Atkins message posts. It is possible that anti-Atkins message board posters choose to spread their message in the way that they feel will be most effective by targeting boards used by those seeking advice from Atkins, or by those already using the Atkins diet). The absence of solely focused anti-Atkins boards is interesting in and of itself but does not affect the quality of this sample or project. As noted, a considerable number of anti-Atkins messages have been reviewed by the thesis, and the absence of anti-Atkins message boards is not a shortcoming of sampling but a characteristic of the field. With that said, the message boards included in this study are: Atkins University (Atkins Nutritionals 1999-2004), Active Low-Carbers Forums (2000-2005), Atkins diet Bulletin Board (2003-2005), iVillage Atkins Board (iVillage 1999-2005), the Atkins Message Board (The-Atkins-Diet.Info 2004) and Atkins Support Group (ezboard, Inc. 1999-2005). These were selected primarily because between them they produce a large array of pro- and anti- Atkins messages. It should be noted, of course, that this thesis is not attempting a quantitative study that assesses just how many people align themselves with one side or the other – nor even to assess whether opposition to Atkins is a significant social phenomenon in terms of numbers of people involved. It is likely that the latter is quite true, but I make no claims here. It is always possible – even if unlikely - that multiple messages under different pseudonyms are sent by the same person (whichever side they are on). Simply assessing the ‘strength’ of different sides, therefore, is not suited to the technique I have adopted, and is not my purpose.

The message boards are similar in structure and content on many levels; however, there are several features unique to specific boards. The Atkins University discussion board

posts are very small, most likely less than 1%. The majority of anti-Atkins posts come from users under the general pseudonym of ‘guest’, which means they have not officially joined the message board as an official member.

is part of the official Atkins Nutritionals (1999-2004) effort to educate Internet users on the basics of the Atkins diet. Atkins University (1999-2004) provides a variety of ‘informative classes and helpful online instructors’ for people who are ‘curious about Atkins, but [are] not sure where to start’ (Atkins Nutritionals 1999-2004). The ‘Atkins Discussion Group’ allows Atkins University users to chat about any Atkins related issue and is moderated by two Atkins ‘experts’³. The Atkins University board runs in three-month sessions and releases transcripts of previous sessions for online public consumption. It is one of the largest Atkins related message boards and contains the least amount of critical debate and malicious discourse.

In contrast, the Active Low-Carbers Forums are officially open to critical debate over any aspect of the Atkins diet. In their section titled ‘Low-Carb Warzone’, the moderators offer this description and warning: “This area is for heated debates of anti low-carb discussion and other arguments. If you are easily offended, please do not enter, as it is less moderated” (Active Low-Carber Forums 2000-2005). The board contains over four million individual messages divided into seventeen broad categories with numerous sub-categories and claims to have more than seventy-five thousand users. It is the largest message board in the sample and provides unique data through the ‘Warzone’ section.

The additional four boards (Atkins diet Bulletin Board, iVillage Atkins Board, the Atkins Message Board, Atkins Support Group) are smaller and exhibit similar features and content to that provided in both the Atkins University and Active Low-Carbers boards. Most boards offer sections devoted to the successes of the Atkins diet, personal motivation, how to use the diet and health issues that may or may not be related to the diet. Additionally, Atkins

³ During the data collection phase of this project, one of the ‘experts’ was a registered nurse; however, this expert has subsequently been replaced by another Atkins expert. Neither of the current moderators appears to possess formal medical training.

friendly recipes are often provided, as well as suggestions for meal planning and other basics of dieting in general. All but the Atkins Message Board (The-Atkins-Diet.Info 2004) are moderated by at least one user and provide self-reported biographical information on users. With the exception of the Atkins University board, open debate occurs over the safety of the Atkins diet and can often turn into a negative exchange of insults. All boards are unanimous on one aspect, despite their participation in open debate; they all attract a large number of Atkins followers who focus on the positives of the Atkins diet and celebrate its invention and usage.

The Self-Governing Atkins dieter

Following any diet regime entails a certain degree of regulation and governance; however, the controversy and prevalence of competing claims regarding the Atkins diet bring even more issues into play for Atkins followers. The message board posts represent a means of self-governance for Atkins followers, as well as provide ample evidence of how self-governing individuals utilize message boards as a *technique of the self* (Novas and Rose 2000). In addition to regulating what they eat and how they adhere to their diet, Atkins followers are also concerned about defending their choice of lifestyle. Many message board users discuss their negative experiences with doctors, friends, family, strangers and organizations that have been discussed above:

However you take a group like PETA or PCRM (tied firmly together) who feel it is their personal responsibility to dictate how I eat then it is another matter altogether. They are set on creating laws that will dictate how we all eat and live and as far as I'm concerned that's where my tolerance ends. Each person

is free to make their own choices until they start infringing on others⁴ (Dieter J – Active Low-Carbers Forums⁵).

I have been alarmed at the mis-information and innate biases of health care professionals when it comes to a low carb lifestyle. Over the last few years, as I saw various primary health care providers, I would always ask about the low-carb approach, as I knew that my weight was becoming an issue, and I was always steered away. The logic varied, but the end result was a perpetuation of all the usual suspects when it comes to “Myths about Atkins” (Dieter D – Atkins University).

I've had so many people tell me that ANA is dangerous, that following it is a heart attack waiting to happen and all the same stuff that I'm sure all of you have heard over and over again. There was even a debate about it on the parenting board I belong to with the low carbers all saying “you're believing the myths without researching the facts”; and it wasn't going anywhere. Like banging your head against a concrete wall. Finally I posted a side by side comparison of what I used to eat, including carbs, fat and calories, and what I eat now, and said “tell me how this is unhealthy for me”. That was the end of the debate (Dieter L – Atkins University).

The message posts above all discuss various points of opposition that low-carb dieters face because of their chosen lifestyle. Despite the numerous objections from various organizations and people, Atkins dieters feel confident that they are doing what is right for them and feel that it is their right to do so regardless of what is said by members of the medical community, friends and family.

The prevalence of opposition faced by Atkins followers is important in several respects. First, Atkins followers view their choice as an autonomous and healthy lifestyle change. They rebel against traditional notions of nutrition and speak frequently of their right to eat the way they want and how their choice is healthy for their individual body. As one

⁴ It should be noted that message boards often contain a great number of typos, misspelled words and awkward phrasing. All quotes extracted from message board posts are reproduced in the original format without any sort of corrections to spelling or grammar.

⁵ Names of individual message board users have been erased and replaced with pseudonyms to maintain anonymity and confidentiality.

user states, "I don't believe in One Size Fits All-diets, and that's why I find Atkins so great, because once you're out of Induction, you start experimenting and educating yourself in your personal diet" (Dieter E – Atkins University). Atkins followers make the time and effort to adapt their diet to their needs; they exhibit features consistent with neo-liberal subjectivities, such as individual responsibility and rational choice. Secondly, outside opposition to the Atkins diet increases feelings of community and shared identity within the message board forum. Many users speak of the frustration of dealing with dissenting views and see the message board as a safe haven for sharing experience:

It's proved that doctors doesn't solve DRE - Diet Related Disorders, the main negligence of the mainstream medicine, as Dr. Atkins said. I am talking about this matter in the Atkins discussion Group, just because I want to share my experience to other ANA followers (Dieter F – Atkins University).

I cannot even begin to say how much my outlook has changed!!! I was about to give up about four days ago when I went to the store and I was thinking that maybe I will loose faster if I just count the calories the old way...well, I came to this site, read a couple of posts and went into the store with my head up high and got some turkey with veggies!!! I felt so grateful to ALL of you because without your support, I would have probably given up on that day!!!! (Dieter M – Atkins University).

I agree totally. I dont know why I have to start a conversation about low carb with "I know what everyones heard about..." Its really irritating but I almost feel I MUST start that way to put them in their place before they start. I have to constantly defend it (Dieter LW – Active Low-Carbers Forum).

Message board users seem to feel at ease in sharing personal experiences, a common practice in anonymous Internet forums (Hardey 2001:393), and come to seek and offer advice in a community of what are traditionally viewed as laypersons. By addressing these concerns

outside the presence of professional experts, lay message board users interact with a site of knowledge that offers support and carries authority without relying on formal expertise.

Message board users are also comfortable offering advice for facing negativity and discourage anti-Atkins sentiment:

As for people telling you it's unhealthy....if you can be more specific about what they think is unhealthy about it, I may be able to give you more precise reassurances and explanations that you can use to educate these folks with (Dieter CT – iVillage Atkins Board).

[in response to an anti-Atkins message post] this is a forum for help and support, not to voice your opinion about your choice of eating habits....as for all of us...we have a found a way that works for us...so for future reference don't come to a Low Carb sight trying to enroll people into "your" WOE⁶, we already have one!! (Dieter EL – Active Low-Carbers).

. The quotes above show how unwelcome dissenting viewpoints can be on their boards and also exhibit how willing frequent posters are to help others defend their diet. Opposition, whether it comes from a medical expert or non low-carb dieter, is dismissed as wrong. In addition to fostering feelings of autonomy and inclusion, the prevalence of competing claims and verbal opposition to the Atkins diet also plays an important role in challenging traditional notions of expertise and lay knowledge. When faced with conflicting health claims, the responsible self-governing dieter garners information from multiple sites of knowledge – expert and lay. By amassing information through a variety of knowledge sources, they form their own perception of what is healthy based on both experience and formal expertise.

While conflict and defense of health and autonomy are key features of conversation, specific to the Atkins program, the message board users also discuss elements of governance related to dieting in general. All message boards have sections that discuss the ‘basics’ of

⁶ As far as I can deduce, ‘WOE’ is an acronym, common to many message boards, that stands for Way Of Eating.

following the diet. Users share recipes, talk about their successes, look for ‘diet support buddies’ and share information about their tips and techniques of their lifestyle:

Here is a link for the USDA nutritional information www.rahul.net/cgi-bin/fat...a/usda.cgi You can type in any food in the top right box and it will list ALL the nutritional information for that food including carb count! You should visit the Dr. Atkins Message Board - it's much more active than the Success Stories board and you can learn a lot from all the people low-carbing (Dieter AS – Atkins Support Group).

This forum is for requesting a recipe or a type of recipe that you would like to learn how to prepare. Other folks can answer these questions by posting their recipes or ideas. If you just want to share a recipe that you already have, please use the forums or the database (Dieter N – Atkins diet Bulletin Board).

Hi everyone! I just signed up for this class yesterday and I read the ‘Buddy’ post. If anyone would still like a buddy to chat with I'm available!! I've been on atkins now for 4 weeks. I've lost 23 lbs. and have decided to stay on the Induction for awhile since I'm more comfortable with it. Hope to hear from Ya (Dieter JP – Atkins University).

The amount of information displayed and accessed for public consumption is astonishing. Users offer experience based advice on a wide range of topics. Users are interdependent and appear to trust and appreciate the advice offered, regardless of the qualifications of the other user. Although some users will suggest a visit to the doctor, often anecdotes about their personal experiences are posted and utilized by those concerned with a particular issue:

I've noticed that several people have posted recently that are really having difficulty in adapting to this way of life. And remember, it is not a diet – it is a way of life. I sense the hopelessness in your words, and it saddens me. As with any addiction, people often have to reach rock bottom before they can begin their recovery. I did. I hope you don't. I hope you can find the strength to help yourself now and not tomorrow. I'm not sure if this will help or even if it will make any sense to you at all but these are my thoughts and they come from the heart... (Dieter AG – Atkins Support Group)

Ok so this is were we document our daily/weekly success or failure. I never thought this Atkins thing would be anything I would do. I originally got the book for my husband because he had an interest...He read it had his doubts and then put it off for a while, in the mean time we both continued to get depressed about or weight and lack of energy. After talking with some friends who had started Atkins in April and heard of the results we thought, "it can't hurt to try, we have tried all the other things." So off we went to the grocery store to change our cupards and refrige for this new lifestyle. We dove right in, and it was not easy the first few days of it. I thought no way can I do this. In fact on day three I was about ready to kill for a pop tart. Now we are into our third week and doing great...My kids are benefiting as well though, I do not have them doing Atkins by any means, but they are eating better...As of today though I am down 11 lbs and feeling great (Dieter AB – The Atkins diet Message Board).

Depression was a constant battle. I even tried a number of times to comit suicide. I was hospitalized for clinical depression. The day I tipped the scale at over 308 pounds, I cried until I was out of tears. I was really out of answers. I exercised and ate low fat and managed to lose a little bit of weight. I stayed at 271 for a year and just about gave up, until a friend asked me if I had tried Atkins. I heard of Atkins, but my nursing background just made me cringe, thinking it couldn't be healthy. I prayed and felt God tell me that Atkins was the answer for me and started the next day and never turned back (Dieter AA – Atkins University).

The sharing of experience becomes an important resource for people whose diet choice often conflicts with mainstream medicine and the general public. They create and sustain a community of likeminded dieters who undertake the intimidating task of managing their weight through a controversial nutritional program. By depending on diet peers and experience as evidence, Atkins message board users liberate themselves from complete dependence on physician expertise.

Another major issue on the message board ties both frustrations and dieting basics together. Many people are concerned with popularized ‘myths’ about the Atkins diet and

claim that people, both against and in support of Atkins, either do not understand what the diet is about or have unreal expectations about what the diet can accomplish. Many online dieters contest common misconceptions that the Atkins diet is all about meat and fat or how it should be followed:

I want to do my part to make certain that folks new to this WOL⁷ do not buy into the theory that excess protein damages your kidneys (Dieter ML – Atkins Support Group).

I realized that the diet wasn't unhealthy like the media and physicians would have you believe. It seemed much more healthy than my current diet of ice cream, mcdonalds, & potato chips (Dieter U – Atkins University).

Low-carbing sounds very easy, you just eat everything labeled low-carb. right? One good thing about this forum is that those who think that way can get the advice they need to do the eating plan correctly (Dieter H – Active Low-Carbers Forum).

Dr. Atkins also made it clear that the metabolic advantage of low carb was not to be used as a license to gorge on low carb foods. The 'eat until satisfied, but not stuffed' principle applies so being able to eat a higher level of calories and still lose weight shouldn't be translated to "I can pig out and lose weight" (Dieter RT – Active Low-Carbers Forum).

Other users discuss their frustrations with people who follow the diet without properly educating themselves about the basics of the diet:

If you have not read the book then at least read these links before starting: Rules of Induction, Acceptable Foods List, Ongoing Weight Loss, Ongoing Weight Loss - Part 2, About Fiber, Sugar Alcohols, Fruits, Nuts, Vegetables, Beverage FAQ, Recipes. And as with any diet it is always a good idea to track what you eat and keep a journal. This helps keeps yourself honest and also helps in seeing trends and patterns of how you eat (Dieter SA – Atkins Support Group).

Read as much as you can on this site. If you immerse yourself in the 'culture' it will feel more natural to follow the plan. The more you educate yourself about ANA, the more excited,

⁷ As far as I can deduce, 'WOL' is an acronym, common to many message boards, that stands for Way Of Life.

motivated, and ‘smart’ you’ll feel about doing this. It will actually become a fascinating hobby, that you’re good at! (Dieter HO – Atkins University).

I just need to vent. I am so tired of reading posts where people are complaining "I only lost 7 lbs on induction, why is this not working",..... "I am on day 5 and have stalled",....."I had really hoped to lose 15 pounds on induction (when they only have 25 to lose)". Just frustrating to see how many people want to use WOE this as another quick magical fix, because they have unrealistic expectations and have done zero research and apparently have read little/nothing about their lowcarb plan. Gee, I actually feel better now that I have gotten that off my chest! (Dieter MD – Active Low-Carbers Forum).

Everyone is looking for a quick fix out there. It took time to put this weight on...it will take time to get it off. I am a HUGE reader..and I read numerous ' diet' books before I came to the conclusion that Atkins was for me. I cannot understand either, why someone would not READ THE BOOK first! (Dieter Y – Active Low-Carbers Forum).

Either way, a large number of message board users take issue with people who do not make an effort to understand and follow the Atkins diet the ‘correct’ way. A common theme apparent in these quotes links back to what has been said about opposition. Users seem to think that opposition or misconceptions about the Atkins diet are merely myths or misunderstandings and these can be cleared up if only opponents were properly educated about the benefits of the Atkins diet. By chastising other users for a lack of self-education, heavy users of message boards make it clear that one should assume responsibility for their own management of low-carb weight loss, instead of expecting a ‘quick fix’ to be obtained with little to no effort.

These recurring themes of choice, responsibility and lifestyle are important as they illustrate “technologies of individuality for the production and regulation of the individual who is ‘free to choose’” (Rose 1990:228). Since the beginning of the nineteenth century there

has been a shift in the location of regulation. Limits have been imposed on state intervention in the private lives of citizens, thus enforcing the distinction between the public and private sphere (Rose 1990). Individuals emerge as self-regulating agents, in control of their own life course and construction of self and identity. However, as Rose argues, new technologies of regulation and citizenship also emerge as public intervention is de-legitimated: “the new technologies of citizenship formation were to gain their power through the subjective commitments to values and ways of life that were generated by the technique of choice and consumption” (1990:226). Thus, through consumption, a wide range of “standards of conduct, forms of life [and] types of ‘lifestyle’” are offered up for individuals to choose from much in the same way that forms of health can be chosen by individual dieters (Rose 1990:227). Rose also suggests that lifestyle and identity are intertwined through choice: “the modern self is institutionally required to construct a life through the exercise of choice from among alternatives...every choice we make is an emblem of our identity, a mark of our individuality...” (1990:227). Thus, when ‘responsible neo-liberal subjects’ choose Atkins as both a diet and lifestyle, not only are they taking on responsibility through preventive maintenance of obesity, or adopting expert and lay health claims, they are choosing a marker of identity from market and commercial alternatives.

Whatever themes emerge for self-governing responsible Internet dieters, one thing is clear; the practice of posting messages and interacting with other likeminded Internet dieters can be treated as a *technique of the self* (Novas and Rose 2000). As Novas and Rose (2000) state “like earlier practices of confession and diary writing, the practices of posting, reading and replying to messages in these webforums and chatrooms are techniques of the self, entailing the disclosure of one’s experiences and thoughts according to particular rules,

norms, values and forms of authority” (2000:502). Thus, while Internet dieters employ message boards as a means of governing the self, they also become subject to the unique ‘rules, norms, values and forms of authority’ of the message board they chose to post on. Traditional ideas about expertise and lay knowledge become obsolete in a certain way. Experts emerge based on their degree of knowledge, their ability to ‘listen’, their ability to give helpful advice and their frequency of posting. Message board users may or may not have a large amount of credentialed authority, but what is important is that they do emerge as having some hybrid form of expertise and become a dominant fixture of their message board. As Novas and Rose (2000) state in their discussion of Huntington’s Disease web forums: “these informal practices of mutual disclosure around such issues among those who identify themselves with a virtual community are significant because they constitute a novel form of authority – an authority based on not on training, status or possession of esoteric skills, but on experience” (2000:503). Thus lay knowledge within message boards becomes paramount as experiential lay knowledge comes to the foreground; it can be instead conceptualized as experiential lay expertise as its authority has been legitimated within the particular Internet community. In other words, the expert/lay divide breaks down further as new forms of expertise emerge online. By virtue of being ‘a responsible Atkins dieter’ who posts on message boards, personal experiences become credentials. Message board users are trusted to make recommendations based on no more than their positive experiences:

I think the ANA is great for everyone. It should have been introduced to the world before the original food pyramid. Maybe then people wouldn't have to deal with Diabetes, Heart Disease and Obesity. I do recommend the approach to everyone. Even if you aren't looking to lose weight I think everyone in their right mind would want to live a full healthy life and the ANA is proven to give them that (Dieter Q – Atkins University).

Other users respect expertise based on shared experience and appear to trust advice that is given.

Although this can be misconstrued as another simple dependence of inexperienced users on more experienced users, there is something unique going on; message board users employ their self-educated, experiential expertise and authority to challenge dominant notions of health and nutrition. Inexperienced users also rely on the constituted informal expertise of experienced users. The concept of what is expert is mutating but not completely dissolving. There is still dependence and legitimacy involved; however, it is not the same as traditional views of expertise. What is important here is that expertise is granted legitimacy through non- traditional and non- professional means. In other words, responsible Internet Atkins dieters employ techniques of the self, pluralise and hybridise expertise and authority to challenge dominant professional medical expertise that questions the health and safety of the Atkins diet. However, message board users are not simply following the emergent diet expertise of the Atkins organization. They are influenced by these professionals but they customize their diet and health according to what they see as best for them, and in this many seem to incorporate the experiential expertise reported by 'lay' contributors. In other words, they engage with *multiple* sites of expertise but often determine, on their own, what model of health, and what techniques to achieve it, they want to adopt. This situation involves both dependence on professional Atkins expertise and self-directed health governance based on individual experience.

In the context of the debates several classes of expertise begin to emerge. On the one hand, of course, is traditional medical expertise, represented by professional associations such as the AMA. Linked with this - but distinct in significant ways - are those forms of scientifically

credentialed expertise associated with the Atkins industry. While the former can claim dispassionate legitimacy, the latter clearly are vulnerable to (and are the target of) accusations that their scientific objectivity has been bought-off. Set against both of these are 'renegade experts' to whom many engaging with the Internet debates appear to turn. These latter - such as the vegan practitioners - may be scientifically credentialed, but deploy other knowledges that direct their observations in a particular 'scientifically unorthodox' direction. Added to these are what could be termed 'lay scientific experts', having (or at least claiming) no scientific credentials but who do claim to have read and understood the scientific literature. In other words, their expertise may be lay in the sense that they are not credentialed experts, but that still draws its legitimacy from scientific research and theory. Disputes among these categories of expertise, in short, mobilise science but dispute the conclusions to be drawn. Against these are still other, perhaps more accurately 'experiential experts', who do not rely on scientific findings but on direct 'empirical' experience. These are more akin to Wynne's Cumbrian sheep farmers, who are experts of their own locale - in this case, experts on their own bodies and their specific reactions to diet. Their expertise sometimes does not so much challenge scientific evidence, but marginalises it, allowing that it might be applicable to many cases, might be a valid finding over an array of cases, but does not work for them. Others, who can be thought of as 'anti-experts', claim that science is abstract, universal and that their own experience *overrides* this form of knowledge. All of these experts and anti-experts, can be set against those who only peripherally engage with the Internet sources on Atkins related issues, and who are in a sense the *consumers* of these different styles of knowledge production and dissemination that muddy any simple distinction between 'lay' and 'expert' knowledges.

Engaging With Competing Claims: The Emergence of Lay Experts

As previously discussed, under neo-liberal models, competing claims become more prevalent and individuals are expected to take on responsibility for their personal health and well-being – to become ‘responsible, self-governing individuals’. Thus, lay people are expected to educate themselves on health matters and become more likely to form more equitable partnerships with medical expertise. Concepts such as Greco’s *duty to be well* (1993), Wynne’s *lay authority* (1996) and Novas and Rose’s *responsible lay expert* (2000) emerge in the literature. All these concepts explicate the idea that individuals, faced with the task of managing their health, are expected to, and it appears in practice begin to, acquire a new form of expertise and responsibility, based on experience and self-education as opposed to credentials and formal training. As individuals engage with multiple sites of knowledge, they are more likely to take a proactive stance in the management of their health and diet. They negotiate treatments, become more involved in medical decision-making and access health information without the guidance of their personal physician. As noted in both sociological and medical literature, the doctor-patient relationship is changing. This relationship is (in neo-liberal discourse, at least) less paternalistic now as physicians are not the sole mediator of medical knowledge. The emergence and popularity of e-health encourages a more patient centred dynamic within this relationship (Hardey 2001:401). More specifically, “it is the information and choices that are available to users that characterize post-traditional society where choices are not constrained by the status accorded to a limited number of ‘experts’” (Hardey 2001:402). Therefore, relationships between professional expertise and educated laypersons are evolving.

As Hardey (1999) and Nettleton (2004) argue, the Internet and the emergence of e-health is contributing even further to this changing relationship as this means of accessing health information occurs decidedly outside the boundaries of traditional doctor-patient relations. Anyone with Internet access can go online at all hours of the day, regardless of geographical location and make a reasonable attempt at diagnosing simple medical conditions or outlining potential treatments, such as weight loss programs, much faster than obtaining an appointment with one's personal physician. Immediacy and sheer quantity of information available online serve to remove the platform that professional experts have traditionally pronounced from. However, as we see with the case of the Atkins diet, online health information is often conflicting - which places the responsible lay Internet user in a position of having to decide for themselves which information to accept as valid. By looking at how message board users engage with claims made about the Atkins diet, it becomes evident how educated frequent message board users have become and how seriously they have taken on responsibility for their chosen form of health and well-being. By engaging with opposing claims and claims making organizations or positions, self-educated message boards users interact with and begin to challenge traditional and dominant sites of expertise and question common-sense notions of what is healthy.

Atkins related message board users engage with contested claims about the Atkins diet in many ways; however, the majority appears to be most interested in the scientific debate over its health and safety. Additionally, message board users are also concerned with medical practitioners' opposition and acceptance of their nutritional lifestyle. Debate over the safety of the Atkins diet occurs on all of the message boards but manifests itself in very different ways. Within Atkins University, debate is much more of a formality and consists of

clearing up common myths and giving advice on how to combat oppositional views and challenges. Debate is most lively on the Active Low-Carbers Forum where their 'Warzone' section welcomes debate and controversial views. The remaining message boards have a sizable amount of debate, but appear to focus on other concerns about dieting in a comparable manner.

While Atkins University appears to be extremely homogenous in their support for the Atkins diet, the other boards have a significant amount of posts from people who do not support the Atkins diet. It is not uncommon to see lengthy threads that originate from an anti-Atkins user who does not frequent the message board in which he or she posts. While the first example below shows a person attempting to sway people away from the Atkins diet, the second and third quotes show how insulting and inflammatory anti-Atkins posts can be on some of the less moderated message boards⁸:

From the day I heard about the Atkins diet I knew it was bad news. but i tried to stay open to the idea and decided to look into it more. In the August 2004 edition of national geographic there is an article on dieting by Ms. Cathy Newman. It turns out YES the Atkins diet does help you lose weight, however, within 6 months gain it all back. In the case of my mother-in-law, she lost 40 pounds on the Atkins diet, then gained 60. Also, this diet is extremely bad for you. The Atkins diet increases your chances of getting breast cancer, prostate cancer, heart disease, constipation, headaches, and even bad breath (Dieter CR – Active Low-Carbers Forums.

YOU ALL ARE FAT LOSERS! THIS DIET SUCKS! (Dieter MA – Atkins diet Message Board)

following the Atkins plan is not only ineffective, it's downright dangerous, you saw what happened to "Dr" atkins. You are clogging your arteries with buckets and buckets of lard fat, and instead of reducing your behinds your making them even bigger, if that's even possible. Now put down the plate of bacon

⁸ It should be noted that pro-Atkins message board users will often respond to inflammatory posts in an equally adversarial way.

and step away from the ranch dressing (Dieter V – Atkins diet Message Board).

Although many of the debates involving Atkins opponents and supporters are often heated, there are those that will be discussed below, that engage in evidenced-based debate as opposed to a war of insults. As briefly mentioned before, Atkins opponents tend to post on pro-Atkins boards instead of forming their own anti-Atkins message boards. This could be because they can reach more of their target audience in their attempt at reeducating Atkins dieters on the basics of health and nutrition, and possibly simply because many lack the technical ability or resources to produce new boards⁹. The debates that ensue between opponents and proponents offer the richest evidence of how message board users engage with competing claims and exhibit self-educated positions with reference to both scientific and experiential evidence.

Although Atkins University operates with far less controversial debates, all the message boards have posts where users engage with competing claims. Many users emphasize the importance of discussing health and safety issues and make a substantive effort to educate themselves and other users on prominent Atkins related debates. The employment of scientific evidence supporting a given claim is highly valued and often requested. Despite an official message board policy on providing evidenced claims, the moderator of the Active Low-Carber Forum often asks dissenting posters: “references to peer reviewed studies specifically on low carb that support everything you just said, please” (Dieter LI – Active Low-Carbers Forums)? The heated debates that often occur after an ‘outsider’ tries to ‘educate’ message board users on the alleged dangers of the Atkins diets are interesting in terms of these requests for evidence. Peer reviewed medical evidence is

⁹ It should be noted that these ideas are my own speculations. Determining their reasoning would require another research exercise beyond the scope of this project.

privileged, especially on the Active Low-Carbers Forums message board, discussed extensively and contested in many ways:

My points are backed up by The New England Journal of Medicine, the director of the Preventitive Medicine Research Institute, countless nutritionists and my personal physician. Many things can help you lose wieght, smoking, amphetamines, bulimea, ect ect, it doesnt mean its healthy (Dieter CR – Active Low-Carbers Forums).

I have never seen an actual medical article from a reputable peer reviewed journal ever say Atkins increases the chances of getting breast cancer, prostate cancer or heart disease. Where are these studies (Dieter PA – Active Low-Carbers Forums)?

The forum isn't mereley about stating opinions. It's primarily about support for LCers¹⁰. Objections founded in new studies, research or insights in physiology will be gratefully recieved (Dieter LI – Active Low-Carbers Forums).

I looked at the site you posted and can't find the specifics like who wrote it and what their credentials are and where are the case studies are that this information represents. Just linking to other reputable sites doesn't make this information reputable (Dieter BB – Active Low-Carbers Forums).

I think your reading and research should start in our "Low Carb Studies and Research/Media Watch" forum (find it near the top of the pull-down menu). There are many articles from journals WITH REFERENCES, authors and case studies that may answer some of your questions (Dieter DK – Active Low-Carbers Forums).

Another method used in attacking opposing views consists of the moderators, or other dominant posters, picking apart a dissenting article point by point and providing a counter analysis of pro-Atkins 'facts'. Abstracts are often displayed for supporting articles from reputable journals and opponents and proponents engage with and quote text from medical studies that support their claims or attack their opponent's claims.

¹⁰ As far as I can deduce, 'LCers' is an abbreviation, common to many message boards, that stands for low-carbers, or people who follow a low-carb diet.

Although medical and scientific evidence are highly valued for attacking oppositional viewpoints, Atkins proponents often speak of anecdotal or experiential evidence to back up their claims stating that the Atkins diet has improved their overall health:

Thank you for reminding me that it's best to listen to my own body...not just any body (Dieter AP – Active Low-Carbers Forums).

I don't need to see any articles. I don't go by articles. I can see how my body reacts and how healthy I am compared to what I used to be. And that is the truth (Dieter SL – Active Low-Carbers Forums).

You can't believe everything you read. But, with proper research, you can find something to believe. And there's the fact that I've been Atkinsing over a year, weight's still gone...I've never felt better. But of course that is anecdotal evidence (Dieter AP – Active Low-Carbers Forums).

Thus, while opponents are challenged to support their claims with peer reviewed, reputable evidence only, Atkins proponents employ both scientific and experiential evidence to support their claims and in conjunction with tactics of other organizations, attacking an opponent's agendas, morals or associations is also a favoured tactic during heated debates. One message board user addresses an article supported by the PCRM, “This one confused me a bit until I found the registry page area which states that this is run by the Physicians for Responsible Medicine. A group known to have an anti-Atkins attitude as they are pushing a vegetarian or vegan diet” (Dieter PA - Active Low-Carbers Forum). A hierarchy of evidence emerges, where science is attached to bias only as far as it dismisses an opponent's claims. How users validate their claims and accept evidence as factual is extremely complicated but does follow certain message board norms.

Understanding the debates in message board space is important for understanding how expertise and lay knowledge are employed here. These debates over the health and

safety of the Atkins diet can contain massive numbers of replies and span months or years. Any topic that evokes massive response is frequented by popular message board users who are extremely educated about controversial Atkins claims and always seem ready to engage in debate to educate others. These users are armed with evidence and experience and often lead the debate by imparting their own self-educated expertise on a given topic. These users have taken on the responsibility of educating themselves on their chosen health practice and often amass a large quantity of knowledge. Others on the message boards offer support and agreement and ask engaged questions of these popular users and moderators. Unlike the moderators of Atkins University, moderators of other boards, and dominant knowledgeable posters, gain respect, authority and expertise without identifying any type of professional expertise, formal training or credentials. Their authority and expertise come from experience, self-education and the support of likeminded users battling the same opposition. These dominant users and moderators emerge as a form of the Novas and Rose's (2000) *responsible lay expert*. However, the inclusion of the term *lay* is somewhat troubling. To truly recognize the emergence of non-traditional forms of expertise, I would argue that the association with traditional lay knowledge be dropped entirely because of its implicit associations with theories of knowledge that privilege traditional scientific expertise over experiential lay knowledge. As Novas and Rose (2000) argue, professional experts are no longer the sole mediators of knowledge. Neo-liberal subjects "engage with knowledge as interested and avid consumers, aware of the range of knowledge products on the market, and demanding that their choice is constantly expanding" (Novas and Rose 2000:506). I argue that message board users who command respect, authority and amass a sizable level of experiential and self-educated knowledge from multiple sites, without regard to formal training or credentials, can

be conceptualized as an example of *informal expertise*. Although they cannot entirely escape certain dependencies on professional experts, by negotiating multiple sites of expert and lay knowledge about the Atkins diet, they hybridize expertise and emerge with a form of expertise both interdependent on expertise and lay knowledge but still distinct from both.

Emergent Expertise and Challenging Dominant Medical Expertise

It is not surprising that a major issue on the various message boards is the dynamics of doctor – patient relationships. Competing claims and direct opposition to the Atkins diet make this relationship a central topic of conversation for message board users and many users speak of taking a proactive stance when discussing this diet with their physician. For one user “it is very important for you to have a good working relationship with your doctor” (Dieter WL - Atkins University). Although they are perfectly willing to follow the Atkins diet without their physician’s support, many Atkins dieters try to convince their physician that the diet is healthy. This is likely because, as Hardey states: “the structure of the health care system that is founded on the primacy of the medical profession ensures that patients are dependent on health care professionals for the majority of clinical treatments and services” (2001:393-394). Thus, while patients may engage in preventive or behaviour based treatments such as dieting without physician consent, they are still dependent on professional medical experts should they need more elaborate treatments such as surgery. Although as noted before, this dependency is also weakening as patients become more educated and better able to negotiate treatment options with their physician.

Not only do Atkins dieters discount health claims against Atkins, they also seek to ‘educate’ professional experts who disagree with their nutritional program. However, while

many patients seek this ideal doctor-patient relationship and several medical authors (Hallenbeck 2002, Wilson et al. 2002, Schattner and Talarticle 2002) and social theorists (Tuckett at al. 1985, Hardey 1999) argue for a more equitable partnership between doctor and patient, many message board users do not receive support from their physician. Users openly discuss the challenges to working with an unsupportive physician and often recommend switching doctors:

when I told my practice I was starting Atkins 2 years ago they were not positive. She even went and pulled out some flyers for me to read about the cons of low carbing it. The funny thing is once I got home and read them they were dated from the early 1990's.just find a doctor who is more knowlegeable on nutrition and fitness or just disregard your doctor's lack of knowlege in this (Dieter T – Atkins University).

Go figure! They don't realize, all of us are different and have different bodies! Not all of "us" can live by the "food pyramid" and stay slim and trim (Dieter DC – Atkins Support Group).

just remember Doctors don't know everything, that is why they call it practicing medicine! If your diabetes doctor doesn't support you, then you need to find a new one. You are in charge of your health, not the doctors. They are merely there to help you get what you need to get better, and so far that doctor isn't doing that (Dieter EK – Atkins University).

These message board users/patients are taking a proactive stance in their chosen health and are ready to abandon the professional expertise of their physician in an effort to defend their autonomy regarding nutrition. They take the time to educate themselves in an effort to 'educate' the physicians who they feel are not informed enough to make a proper decision regarding Atkins. By assuming control over their chosen nutritional regime, despite objections from professional physicians, message board users challenge dominant medical expertise.

As observed by Schattner and Talarticle (2002), “the concept of patient autonomy has been widely accepted as a basic ethical principle. The right of a patient to control his or her treatment has largely superceded the former paternalistic approach of physicians” (2002:66). Given that patients have the right to choose a form of health that they deem suitable, it is not surprising in the current environment that they turn to alternate forms of education and advice even when faced with an unsupportive physician. The World Wide Web and Atkins diet message boards provide a space for both education and support and facilitate educated challenges to dominant medical expertise. Not only do users discuss unsupportive physicians and proactive responses such as switching doctors, they take their health care into their own hands by several other methods. In an obvious display of responsibility and emergent expertise, message board users speak of challenging their doctors or making ‘deals’ with them about following the Atkins diet:

Sometimes, because of Insurance or other reasons, it's not so easy to just change doctors. If that is the case for you, perhaps you can just make a deal with your doctor. If he'll support your diet plan for 2 months, you'll redo all your bloodwork to reassure him that ANA is doing wonders for your health. Sometimes doctors just need some positive experiences and concrete results to become supportive (Dieter VC – Atkins University).

Practitioners can review presentations on our site to update their knowledge. Of course they have to be open minded enough to be willing to take the time to read them...One of the best ways to educate them is for you to succeed long term so they can see the results. That's often how many practitioners get over their negatives they so often hear in the media (Dieter KJ – Atkins University).

When I get my physical, I am not going to mention Atkins until the results of each test is in (or the doctor mentions my weight loss - whichever comes first). I don't know if my doctor is Atkins friendly or not. He's a vegetarian, so maybe he'll tell me to lay off the red meat (Dieter VM – IVillage)!

This process of challenging a physician suggests that self-educated message board users feel confident with their newly acquired Atkins knowledge and are comfortable with the idea of challenging their physician in an effort to form a more equitable and patient-oriented partnership.

Last, message board users directly challenge several forms of medical expertise, physicians and nutritionists, by claiming that they are simply misinformed about the Atkins diet or they are just plain wrong:

Your diabetes doctor is WRONG... I have researched Atkins extensively I am 100% sure that it is a much healthier option for you (Dieter WS – Atkins University).

your links only show what everyone in this forum knows, that there are a lot of folks that are dead-set against it. We all know that most nutritionists do not accept this diet. Our contention is that they may be well meaning and are probably all nice people, but they are, however, wrong (Dieter MF – Active Low-Carbers Forums).

So in many respects I would think that the greatest challenge the ANA faces is changing the unwarranted negative view of the approach and convincing practitioners to embrace the science, and dismiss the stigma (Dieter PL – Atkins University).

While mainstream medicine and nutrition have, on the whole, criticized the Atkins diet, the facts speak for themselves (Dieter G – Atkins Support Group).

To suggest that an individual physician or a body of professional medical experts is wrong shows a great amount of confidence in one's claims. By challenging the claims and education of professional experts, message board users exhibit a level of experiential expertise that must be taken seriously. Using the Internet as a technique of self-education through research and interaction with other likeminded message board users, Atkins followers can find a vast

amount of resources and support to mount a direct challenge to dominant notions of health, well-being and nutrition. While the responsible lay expert that Novas and Rose (2000) describe engages with professional expertise without much opposition, Atkins message board users are faced with a great degree of expert conflict which necessitates a level of opposition that is not necessarily common to many health conditions or treatments. By following a nutritional regime that is on the fringe of the medical community as it is, Atkins dieters assume a defensive position whether they educate themselves or not. By assuming responsibility for their chosen health, Atkins dieters both challenge hegemonic perceptions of health and defend their patient autonomy.

While Hardey (1999:832) suggests that the mere presence of electronic health information suggests a challenge to medical expertise through exposure and deprofessionalisation, I would argue that the proactive stance that message board users/patients take is something different. By engaging with debounded online medical expertise, responsible Internet users make an attempt at achieving a level of expertise separate from that of physicians that is also separate from the common-sense knowledge typically equated with lay knowledge. This achievement may exist with considerable opposition from professional expertise, but nonetheless represents an important effort at establishing informal expertise outside the boundaries of the traditional doctor-patient relationship. This means of informal expertise and hybrid knowledge, where patients can meet with physicians in a more equitable partnership, as opposed to a strict dependency, represents a serious challenge to dominant medical expertise that could not occur without the resources and space provided by the Internet. By interacting with like-minded Internet users and engaging with conflicting web based discourses, Atkins dieters act as consumers of

health and information as they defend their choice of diet. In short, faced with controversial medical views on the Atkins diet, message board users make a clear effort at choosing a health (Greco 1993) rather than having one imposed on them by professional medical experts who oppose their autonomous perceptions of what health and well-being constitute.

According to O'Malley, Weir and Shearing (1997), governmentality studies "have constructed their theoretical object as one of political rationality and technologies, a restriction that precludes problematizing effects, and thus presumably eliminates the possibility of assigning costs to any mentalities of rule" (1997:509). In other words, there is an absence in the governmentality literature when it comes to critique and contestation. By examining the 'messy actualities' of governance and social relations, I feel that my work connects opposition and responsibility in the area of diet and health governance. Unlike Novas and Rose's *responsible lay expert* who posts in Huntington's disease web forums, Atkins web users operate on the fringe, in opposition to dominant medical orthodoxy. They are not relying on and working in conjunction with widely accepted medical theory, practice and expertise. Standing in opposition to the general medical community, self-governing Atkins dieters draw upon multiple, contested sites of knowledge (expert, lay and hybrid) in order to contest and reshape common perceptions of healthiness. They value autonomy and choice and draw out a nutritional regime that is 'right' for their own individual self. What is most important here, and slightly neglected in most of the governmentality literature is the connection between responsibility and oppositional resistance. In other words, the process of responsabilization is not just a process of self-education and adherence to dominant and accepted forms of knowledge. Responsibilization can also be a process of resistance, as in the case of responsible Atkins dieters. In this scenario, health partnerships are less ideal than

those suggested in previous studies, and involve conflict, resistance and opposition in the pursuit of healthiness.

Concluding Thoughts

This thesis has explored several issues important to the study of Atkins dieting and the Internet. The principal aim of this project has been to investigate how Atkins dieters utilize the Internet both to govern their dieting experience and to interact with various forms of expertise. An exploration of sociological and medical literature on relations between expertise and lay knowledges provides a strong basis from which to understand these processes. Thus a secondary aim of this project involves breaking down the dichotomy of expertise and lay knowledge and recognizing the potentials of hybrid knowledges and emergent forms of expertise. The third and final aim of this thesis is to examine how competing claims about the Atkins diet are manifested on the Internet. By exploring how competing health claims are presented and utilized by Atkins friendly and non-friendly experts and lay organizations, this project establishes a politics of web based Atkins resources and examines the web of health claims that ‘responsible’ individual dieters must confront to best govern their dieting experience.

By examining a variety of Atkins related message boards through qualitative textual analysis, this project addresses all three aims. Drawing upon theoretical explorations of the changing relations of expertise, we begin to see evidence of these changes within the doctor-patient relations described on the message boards. By making a deliberate choice about nutritional lifestyles that directly conflicts with dominant perceptions about healthiness and well being, Atkins dieters also directly challenge dominant medical expertise. We now see that responsibility and conflict can coexist and that being a responsible healthy citizen does not always involve following mainstream medicine. By challenging dominant medical

expertise, responsible Atkins dieters exhibit features of self-educated hybrid knowledge and expertise that is neither completely 'expert' nor completely 'experiential'.

As a project of necessarily limited scope, this thesis is incomplete in several respects. I have addressed all of my aims, goals and objectives; however, inevitably, more questions emerge throughout this process. With this in mind, I fully intend to continue the work I have started with this thesis and further explore changes in the doctor-patient relationship, hybrid forms of knowledge and expertise and the potentials and realities of the impact of the Internet on the field of health and dieting. How expertise is constituted, defined and accepted is a constantly evolving project. The plural and muddled definition of formal and informal expertise will provide great opportunities for future research. In short, this thesis has emerged as a project of importance for both myself and the bodies of literature within I work. It is a project with practical importance outside academia and one that I will remain passionate about for some time.

Methodological Note

I have performed a qualitative analysis of competing expert claims, individual responses to risk and lay governance of health and weight loss. To accomplish this task, web message boards are the primary object of analysis with a secondary focus on other web-based discourses. Though not without its epistemological and ontological challenges, qualitative analysis is well suited to this project, as it provides the necessary contextual depth to fully explore my research questions.

There is a vast amount of information on the Internet regarding the Atkins Nutritionals (1999-2004) program. Because ‘responsible neo-liberal subjects’ (that is, the subjectification of this type created by neo-liberal discourses) must negotiate competing claims to best govern health risks, web users would potentially encounter a wide variety of websites both supporting and opposing the health and safety of the controversial Atkins Nutritionals (1999-2004) program. By exploring relevant web discourses, I aim to establish what competing claims exist, examine how expertise and lay knowledges engage with these claims and consider what self-governing dieters will encounter when assuming responsibility for their health and well-being through the investigation of contested diet programs online.

Web message boards are the ideal object of analysis for answering my primary research question in this project, particularly for examining the interaction of expert and lay knowledges. In a methodologically similar study on Huntington’s Disease related chat rooms, Novas and Rose (2000) address unique aspects of these web based discourses: “these informal practices of mutual disclosure around such issues among those who identify themselves with a virtual community are significant because they constitute a novel form of authority – an authority based not on training, status or possession of esoteric skills, but on

experience” (2000:503). Given the relative ‘novelty’ of these forums, methodological process is less clearly defined, though closely related to general analysis of discourses. Messages from the various boards have been logged and categorized based on competing claims, forms of knowledge, governance of risk, assumption of responsibility and other related themes until emergent categories become redundant.

The unique position of the Internet as a relatively new technology produces distinct ethical concerns in conducting web-based research. Web discourse is often viewed as private discourse within a public setting, but the Internet is not a physical space that is easily governed by conventional public/private boundaries (Fernback 1997:50). As Waskul and Douglass (1996:131-132) argue, the web-based world is both ‘publicly-private’ and ‘privately-public’. This blurred distinction has interesting implications for the online researcher regarding the principle of informed consent. Although web-based discourse is available for public consumption, do its producers have a reasonable expectation of privacy? Ultimately, provisions of anonymity eliminate the need for informed consent in Internet research (Ess 2002:10, Eysenbach and Till 2001); however, consideration of its uniqueness as a site of research is essential for any ethical Internet researcher. Ultimately, I feel the benefits of exploring message boards as public domain are numerous and conditions of anonymity have been provided to reduce any perceived exploitation.¹

¹ Specific methodological questions, especially concerning the sampling of websites and chat rooms, are dealt with in the text of the thesis. Please see pages 88-90.

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