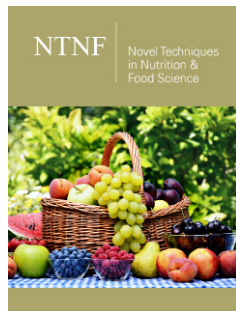


# Generating Predictions About New Food Mind-Sets Using AI: An Insights-Development Technology Based Upon the Mind Genomics Way of Thinking

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## Abstract

This paper introduces a new approach to understanding the mind of customers, namely the positing of mind-sets and then the request that AI provide information about these postulated mind-sets. The objective is to provide researchers with an approach which empowers critical thinking by directing the user to “looking into the future” with specific foci based on previous science. The approach is demonstrated by AI-generated prediction of six new nutritional mind-sets.

**Keywords:** Mind-set; Artificial intelligence; Food; Nutrition; Mind genomics; Radical detoxification

**Abbreviations:** AI: Artificial Intelligence; ChatGPT: Chat Generative Pre-training Transformer; GMO: Genetically Modified Organism; PALEO: Paleolithic; pH: Potential Hydrogen

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## Introduction

This paper presents a new approach to predict the features of food fads. The approach uses artificial intelligence powered and directed by Mind Genomics. Mind Genomics is an emerging science which got its start from understanding how people make decisions and very specifically how they weigh the different aspects of information to arrive at a decision. The actual history of Mind Genomics represents the evolution of purely empirical investigation [1,2] into an investigation using AI as a tool to suggest questions and answers and, finally, a tool to synthesize questions and answers. The history of Mind Genomics provides an interesting background to this particular effort to synthesize mind-sets about nutrition. This paper focuses on the last part, the use of AI to synthesize mind-sets. One might think about different aspects of nutrition and ask people in whichever way one wishes to rate the importance of those different aspects. Then, move from asking the people to move from general ideas about nutrition to rating specific ideas. That is give the topic of nutrition some “meaning,” not simple general words which fail to create an impactful word picture.

Mind Genomics took this topic and said that rather than having respondents, survey takers, rate the importance of single factors of a topic, say nutrition, it might be more realistic to present the respondents with combinations of single ideas or messages about nutrition (so-called “elements”) and instruct the respondent to rate the combination as if they were rating a story about nutrition, or about the nutrition of a new product. After all, goes the thinking, people in the real world are confronted with these combinations of ideas, not with single topics. It is unusual to work with single ideas. It is especially difficult to create “new products” or “new services” from strong-performing single ideas of a general nature.

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Researchers using Mind Genomics ended up experiencing something totally unexpected. Many people, especially those who were more advanced in their fields had difficulty coming up with questions and then answers to those questions. And so, for many people, especially the professionals, the task of developing ideas seemed so contrary to their disciplined thinking that they reported experiencing difficulties and even irritation at doing the task. People could do the task, but a “coach” was needed.

ChatGPT was introduced to the public with great fanfare about two years ago and almost immediately began to exert its influence on critical thinking in education [3,4]. It was this juncture a year ago in the middle of 2022 when ChatGPT was put into the Mind Genomics platform (BimiLeap.com), along with an easy-to-use Idea Coach. The use of Idea Coach allowed the researcher to develop a paragraph leading to a “behind-the-scenes” prompt. ChatGPT embodied in Idea Coach ends up producing the questions and later, answers to questions, in a matter of seconds. It was easy to re-run the request to Idea Coach, generating so-called iterations. The Mind Genomics platform did all of the work. The process was so simple that grade school students in the third grade were able to become researchers [5].

The next step, leading to this paper, was a happy, fortunate coincidence where, strictly without expectation, we gave Idea Coach

the entire background of the topic and ended up with far deeper and exciting results. Could Idea Coach (AI) move beyond asking questions and answers about a topic or postulating the existence of mind-sets? This approach was done in the spirit of AI-directed help to understand the future. Specifically, could AI powered by Mind Genomics thinking go more deeply, to describe in detail a variety of new nutritional mind-sets? The remainder of this paper is devoted to what we learned when we did the exact study that was done, and the results obtained. In doing so, the approach follows the approach taken by futurists [6-8].

**Method**

Table 1 shows the prompts given to the Mind Genomics Program, BimiLeap.com. Instead of requesting a set of questions and answers based upon a short paragraph (the “squib”), the researcher wrote a longer, but equally low-information squib shown in Table 1. As can be seen, the table starts with a very short introduction about the respondents and the postulation that there are mind-sets of trends and fads in nutrition.

Table 1 requests the name of the mind-set, the key message, slogans which emblemize what to avoid and to consume, the motivations, the grounding of the mind-set and the predictions. Note that these types of questions simply ask the AI to give answers. The questions are targeted. No specifics are presented to the AI.

**Table 1:** Radical Detoxification.

At every turn I read about foods which are bad for me. I am nervous. I am about to turn 80. What should I believe?
I know that there are different mind-sets of stories about the problems in food.
For each mind-set, tell me the following:
1. The key message of the mind-set
2. Four slogans which emblemize what the mind-set is telling me to avoid, and why
3. Four slogans which emblemize what the mind-set is telling me to consume, and why
4. Four motivations for the mind-set for telling me what it is telling me, either positive or negative
5. A six-paragraph story about the interview of this mind-set with a nutrition magazine which wants to find out the science behind the points of view, the strategy of the mind-set, how people respond, and finally the corporations supporting this mind-set
6. Describe how the mind-set can be said to be grounded in good science.
7. Describe how the mind-set can be said to be grounded in hucksterism.
8. Describe how the mind-set can be said to be grounded in self-interest financially.
9. Describe how the mind-set can be said to be grounded in “what’s hot,” viz., looking for something to hang on to.
10. Describe where the mind-set will be in one year.
11. Describe where the mind-set will be in five years.
12. Describe where the mind-set will be in ten years.

Table 2 begins with the first of these far-out mind-sets. This mind-set is the RADICAL DETOXIFICATION. The key message is obvious: Avoid processed foods and toxins to cleanse your body and improve overall health. Numbers 2 and 3 are slogans. Slogans are

easier to use to convince people. Number 4 deals with motivations- why are people doing it? Number 5 assumes a nutrition magazine, while numbers 6, 7, 8 and 9 talk about sources of information in which this is built. Finally, steps 10 to 12 are predictions.

**Table 2:** The Direct AI Description of Mind-Set, RADICAL DETOXIFICATION.

Radical Detoxification
1. Key Message: Avoid processed foods and toxins to cleanse your body and improve overall health.
2. Avoid: “Say no to sugar - it’s poison for your body,” “Processed foods are killing you slowly,” “Ditch the chemical additives for a natural body,” “Detox your body from harmful toxins”

3. Consume: "Eat organic, whole foods for a clean body," "Embrace plant-based diets for ultimate detox," "Drink plenty of water to flush out toxins," "Include detoxifying herbs in your daily routine"
4. Motivations: Positive - promoting a healthy lifestyle, preventing chronic diseases; Negative - fear-mongering about toxic food ingredients, incentivizing detox products
5. In a nutrition magazine interview, RADICAL DETOXIFICATION advocates explain the benefits of avoiding processed foods and toxins in the diet. They emphasize the importance of natural ingredients and clean eating for overall health. Some respond positively to the message, while others question the extreme approach to detoxification. Corporations supporting this mind-set may include organic food producers and detox product manufacturers.
6. Grounded in good science: The mindset is grounded in the idea that processed foods and toxins can have negative effects on the body. Scientific studies have shown that some artificial additives and chemicals in food can be harmful.
7. Grounded in hucksterism: The mind-set can be seen as promoting unnecessary detox products and fearmongering about food ingredients to sell products.
8. Grounded in self-interest financially: Some advocates of RADICAL DETOXIFICATION may have a financial interest in selling detox products or promoting specific diets.
9. Grounded in "what's hot": The mind-set may be grounded in the current trend of health and wellness, with people looking for new ways to improve their health.
10. In one year: The mind-set may gain more popularity among health-conscious individuals.
11. In five years: RADICAL DETOXIFICATION could become more mainstream, influencing dietary guidelines and food production practices.
12. In ten years: The mind-set may evolve to include more sustainable practices, such as supporting local and organic food systems.

Table 3 shows a subsequent, deeper analysis of the mind-set generated by AI. The Mind Genomics platform provides a set of analyses, which move more deeply, analyzing the synthesized mind-sets.

**Table 3:** Deeper Analysis About the (Hypothesized) Radical Detoxification Mind-Set.

Questions
1. How does RADICAL DETOXIFICATION believe processed foods impact our health?
2. What specific toxins do advocates of RADICAL DETOXIFICATION warn against?
3. What foods are encouraged to be avoided in a detox diet?
4. How does the mind-set promote natural ingredients and clean eating?
5. What scientific evidence supports the claims of RADICAL DETOXIFICATION?
6. How do corporations' benefit from promoting detox products?
7. What motivates individuals to follow the principles of RADICAL DETOXIFICATION?
8. How do people respond to the extreme approach to detoxification advocated by this mind-set?
9. What role do organic food producers play in supporting RADICAL DETOXIFICATION?
10. How do detox products fit into the principles of this mind-set?
11. How does RADICAL DETOXIFICATION address concerns about nutrient deficiencies in restrictive diets?
12. How does the mind-set view the role of water in detoxifying the body?
13. How do detoxifying herbs play a part in the dietary recommendations of RADICAL DETOXIFICATION?
14. How does the mind-set plan to evolve over the next five years?
15. What changes do advocates of RADICAL DETOXIFICATION hope to see in the food industry in the future?
Key Ideas
1. The impact of processed foods on health and the importance of avoiding them in the RADICAL DETOXIFICATION mind-set
2. Specific toxins that advocates warn against in the RADICAL DETOXIFICATION mind-set
3. The foods encouraged to be avoided and consumed in a detox diet according to RADICAL DETOXIFICATION
4. How the mind-set promotes natural ingredients and clean eating for overall health
5. The scientific evidence supporting the claims and principles of RADICAL DETOXIFICATION
6. How corporations benefit financially from promoting detox products in line with the mind-set
7. The motivations individuals have for following the principles of RADICAL DETOXIFICATION
8. How people respond to the extreme approach to detoxification advocated by this mind-set
9. The role of organic food producers in supporting and promoting RADICAL DETOXIFICATION
10. How detox products fit into the principles and recommendations of RADICAL DETOXIFICATION
11. How concerns about nutrient deficiencies in restrictive diets are addressed by the mind-set
12. The importance of water in detoxifying the body according to RADICAL DETOXIFICATION

13. The role of detoxifying herbs in the dietary recommendations of RADICAL DETOXIFICATION
14. The potential evolution and changes expected in the RADICAL DETOXIFICATION mind-set over the next five years
15. The desired changes and improvements advocates hope to see in the food industry in relation to the principles of RADICAL
<b>Themes</b>
Health impact of processed foods and toxins:
1. The impact of processed foods on health and the importance of avoiding them in the RADICAL DETOXIFICATION mind-set
2. Specific toxins that advocates warn against in the RADICAL DETOXIFICATION mind-set
Detox diet guidelines and recommendations:
3. The foods encouraged to be avoided and consumed in a detox diet according to RADICAL DETOXIFICATION
4. How the mind-set promotes natural ingredients and clean eating for overall health
5. The importance of water in detoxifying the body according to RADICAL DETOXIFICATION
6. The role of detoxifying herbs in the dietary recommendations of RADICAL DETOXIFICATION
Support and criticism of RADICAL DETOXIFICATION:
7. The scientific evidence supporting the claims and principles of RADICAL DETOXIFICATION
8. How people respond to the extreme approach to detoxification advocated by this mind-set
9. How concerns about nutrient deficiencies in restrictive diets are addressed by the mind-set
Industry and societal implications:
10. How corporations benefit financially from promoting detox products in line with the mind-set
11. The motivations individuals have for following the principles of RADICAL DETOXIFICATION
12. The role of organic food producers in supporting and promoting RADICAL DETOXIFICATION
13. The potential evolution and changes expected in the RADICAL DETOXIFICATION mind-set over the next five years
14. The desired changes and improvements advocates hope to see in the food industry in relation to the principles of RADICAL DETOXIFICATION
<b>Perspectives</b>
Plus:
1. Focus on avoiding processed foods and toxins for improved health
2. Emphasis on natural ingredients and clean eating
3. Potential for scientific evidence to support detox claims
4. Encouragement of organic food production and consumption
Minus:
1. Extreme approach to detoxification may not be suitable for everyone
2. Concerns about nutrient deficiencies in restrictive diets
3. Potential for corporations to profit from promoting detox products
4. Potential for individuals to follow mind-set without proper understanding or guidance
Interesting:
1. Role of detoxifying herbs in diet recommendations
2. Evolution and changes expected in the mind-set over time
3. Motivations individuals have for following principles of RADICAL DETOXIFICATION
4. Desired changes and improvements advocates hope to see in the food industry
<b>What is Missing</b>
1. How does RADICAL DETOXIFICATION define a “toxin” in the context of its message?
2. What potential risks or limitations are associated with following a RADICAL DETOXIFICATION diet?
3. How does the mind-set address the psychological and emotional aspects of detoxification and clean eating?
4. What practical tips or advice does RADICAL DETOXIFICATION offer for individuals looking to implement its principles into their daily lives?
5. How does RADICAL DETOXIFICATION approach the concept of exercise and physical activity in conjunction with dietary changes for detoxification?
6. In what ways does RADICAL DETOXIFICATION promote overall wellness beyond just diet and detox practices?
7. How does RADICAL DETOXIFICATION address the issue of sustainability in food production and consumption?
8. What are some potential criticisms or controversies surrounding the RADICAL DETOXIFICATION mind-set?

<b>Alternative Viewpoints</b>
Alternative viewpoints on the topic questions could include:
1. Some nutrition experts may believe that the body has its own natural detoxification mechanisms and that extreme detox diets are unnecessary.
2. Critics may argue that the fear-mongering tactics used by RADICAL DETOXIFICATION advocates are not based on strong scientific evidence and may lead to unnecessary anxiety about food.
3. Others may question the financial interests of corporations promoting detox products and suggest that they may be more focused on profit than on true health benefits.
4. Some individuals may feel overwhelmed by the extreme approach of RADICAL DETOXIFICATION and prefer a more balanced approach to health and nutrition.
5. Skeptics may question the long-term sustainability and effectiveness of following a strict detox diet, as well as the potential for nutrient deficiencies.
<b>Interested Audiences</b>
1. Health-conscious individuals: These individuals are likely interested in learning about the impact of processed foods on their health and how they can avoid toxins to improve their overall well-being.
2. Nutritionists and dietitians: Professionals in the field of nutrition may be interested in understanding the scientific evidence behind the claims of RADICAL DETOXIFICATION and how they can incorporate these principles into their practice.
3. Organic food producers: These producers may be interested in how they can support and align with the principles of RADICAL DETOXIFICATION to promote their products and gain consumer trust.
4. Detox product manufacturers: Companies that produce detox products may want to learn about how they can align their marketing strategies with the mind-set of RADICAL DETOXIFICATION to appeal to health-conscious consumers.
5. Environmentalists: Individuals who are passionate about sustainable practices and reducing harmful chemicals in the environment may be interested in the potential evolution of RADICAL DETOXIFICATION towards more sustainable practices.
Overall, these audiences may be most interested in the topic questions as they align with their personal or professional interests in health, nutrition, sustainability, and consumer behavior.
<b>Opposing Audiences</b>
Audiences that might oppose the RADICAL DETOXIFICATION mind-set include:
1. Individuals who do not believe in the concept of detoxification through diet: Some people may be skeptical of the idea that detoxifying the body through diet is necessary or effective. They may view it as a fad or unnecessary trend.
2. Nutritionists and dietitians who advocate for a balanced approach to eating: Professionals in the field of nutrition may oppose the extreme approach to detoxification promoted by RADICAL DETOXIFICATION. They may believe in a more balanced and sustainable approach to eating that includes a variety of foods.
3. People who enjoy processed foods and do not want to give them up: Individuals who have a strong attachment to processed foods may resist the idea of eliminating these items from their diet. They may not see the harm in consuming these foods or may not want to make drastic changes to their eating habits.
4. Critics of fear-based marketing tactics: Some individuals may be critical of the fear-mongering tactics used by advocates of RADICAL DETOXIFICATION, such as demonizing certain food ingredients or promoting detox products with dubious claims. They may see these tactics as manipulative or exploitative.
5. Those who are concerned about nutrient deficiencies on restrictive diets: Some people may worry that following a strict detox diet could lead to nutrient deficiencies or other health problems. They may be hesitant to adopt a diet that limits certain food groups or nutrients.
Overall, opposition to the RADICAL DETOXIFICATION mind-set may stem from a range of beliefs and concerns, including skepticism of detoxification through diet, a preference for processed foods, a desire for balanced eating, skepticism of fear-based marketing tactics, and concerns about nutrient deficiencies on restrictive diets.
<b>Innovations</b>
1. A detox meal delivery service that provides organic and clean eating options in line with the RADICAL DETOXIFICATION principles
2. A detox retreat or spa experience focused on holistic health and detoxification practices
3. A detox app that helps users track their detox progress, find recipes, and connect with a community of like-minded individuals following the RADICAL DETOXIFICATION mind-set
4. A policy mandating clearer labeling for processed foods and toxins in products, in line with the principles of RADICAL DETOXIFICATION
5. A line of detoxifying herbal supplements or teas endorsed by advocates of the RADICAL DETOXIFICATION mind-set
6. A detox certification program for restaurants and food producers who adhere to the principles of clean eating and natural ingredients promoted by RADICAL DETOXIFICATION

## Discussion and Conclusion

The objective of this paper is to show how LLMs (Large Language Models) can help the researcher to understand the increasingly complex world of mind-sets through artificial intelligence. Using

LLMs allows the researcher to specify the mind-sets, or to request that the LLM synthesize mind-sets. When the LLM synthesizes mind-sets, the instructions can be to synthesize a limited number of radically different ones, or simply to synthesize different mind-sets. The outcome is a clear understanding of what might be a very

confusing, very business landscape. The power of LLMs is such that these explorations can be done quickly and with various questions asked of these synthesized or simulated mind-sets. The objective of this paper is to demonstrate the potential of AI to identify new or emerging mind-sets at a level of detail that moves beyond general predictions but does not make concrete predictions of the science. The mind-sets in this paper make sense, are not surprising and probably represent mind-sets which can be already guessed about. The importance of the approach is to stimulate critical thinking by an easy-to-use platform (BimiLeap.com), the incorporation of simple to write prompts (Idea Coach) and short iteration times in the span of 10-30 seconds per iteration, as well as rapidly provided deep analyses. At the end, if one were to define the one key benefit of this AI-based approach, it would be critical thinking which makes the user and the AI companions on the road to learning.

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