



# **Your Ultimate Guide to**

## *Integrative & Functional Nutrition*

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## Introduction & Definition

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Integrative and Functional Nutrition (IFN) is a forward-thinking approach to healthcare that focuses on identifying and addressing the root causes of disease rather than merely treating symptoms. It emphasizes a personalized, systems-oriented model that empowers patients to take an active role in their health (1).

This approach integrates traditional food wisdom, current evidence-based science, and the principles of Functional Medicine to provide a comprehensive strategy for health promotion, disease prevention, and nutritional treatment of chronic diseases (2).

**"The power of food as medicine is more than just an idea. It's a practical solution that can help us heal our bodies, prevent disease, and achieve optimal health."**

**-Dr. Mark Hyman**

1. Jones DS, Quinn S (2010). Textbook of Functional Medicine. Gig Harbor: Institute for Functional Medicine.

2. Minich DM, Bland JS (2013). Personalized lifestyle medicine: relevance for nutrition and lifestyle recommendations. The Scientific World Journal.



## Core Principles of Integrative & Functional Nutrition

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Integrative and Functional Nutrition revolves around a set of foundational principles that reshape the way we think about health and wellness. The approach is highly personalized, employs a systems biology approach, seeks to identify and address the root causes of health issues, and values the therapeutic relationship between the practitioner and the patient.

**1****Individualized Care****2****Systems Biology****3****Root Cause Resolution****4****Therapeutic Relationship**



# Individualized Care

Integrative and Functional Nutrition takes pride in its distinct approach to health and wellness – one that is far removed from the conventional "one-size-fits-all" model. IFN professionals understand that each person is unique, with their own specific nutritional needs. This individuality comes from a combination of our genetics, lifestyle choices, and the environment in which we live (1)

**Genetics:** Our genes play a substantial role in our health and well-being. They can influence our risk for certain health conditions, how we metabolize different nutrients, and even our preferences for certain foods. IFN acknowledges these genetic differences, using them as a guide to provide personalized dietary advice (2).

**Lifestyle:** Our daily habits – such as what we eat, how much we move, our sleep patterns, and how we manage stress – significantly influence our health. IFN professionals work closely with individuals to understand their lifestyle patterns and provide practical strategies for improvement that align with their personal needs and circumstances (3).

**Environment:** Our surroundings, including where we live and work, the air we breathe, the water we drink, and our exposure to various toxins, can profoundly impact our health. IFN practitioners consider these environmental factors when developing personalized nutrition strategies, recognizing the need to support the body in the face of these challenges (4).



**"You are not what you eat, you are what you do with what you eat."**

**– Dr. Jeffrey Bland**

1. Minich DM, Bland JS (2013). Personalized lifestyle medicine: relevance for nutrition and lifestyle recommendations. The Scientific World Journal.
2. Nielsen DE, El-Sohemy A (2014). A randomized trial of genetic information for personalized nutrition. Genes & Nutrition.
3. Arena R, Guazzi M, Lianov L, Whitsel L, Berra K, Lavie CJ, Kaminsky L, Williams M, Hivert MF, Franklin NC, Myers J, Dengel D, Lloyd-Jones DM, Pinto FJ, Cosentino F, Halle M, Gielen S, Dendale P, Niebauer J, Pelliccia A, Giannuzzi P, Corra U, Piepoli MF, Guthrie G, Shurney D. (2015). Healthy Lifestyle Interventions to Combat Noncommunicable Disease—A Novel Nonhierarchical Connectivity Model for Key Stakeholders: A Policy Statement From the American Heart Association, European Society of Cardiology, European Association for Cardiovascular Prevention and Rehabilitation, and American College of Preventive Medicine. Mayo Clinic Proceedings.
4. Patel O, Shahulhameed S, Shivashankar R, Tayyab M, Rahman A, Prabhakaran D, Tandon N, Jaacks LM. (2020). Association between full service and fast food restaurant density, dietary intake and overweight/obesity among adults in Delhi, India. PLoS One.

# Systems Biology

The approach of Integrative and Functional Nutrition (IFN) is rooted in systems biology, a field of study that understands that our bodies function not as separate parts, but as a complex, interconnected system. This comprehensive viewpoint is crucial because it recognizes that an issue in one area can influence health in another area, highlighting the interconnected nature of our bodies and health (1).

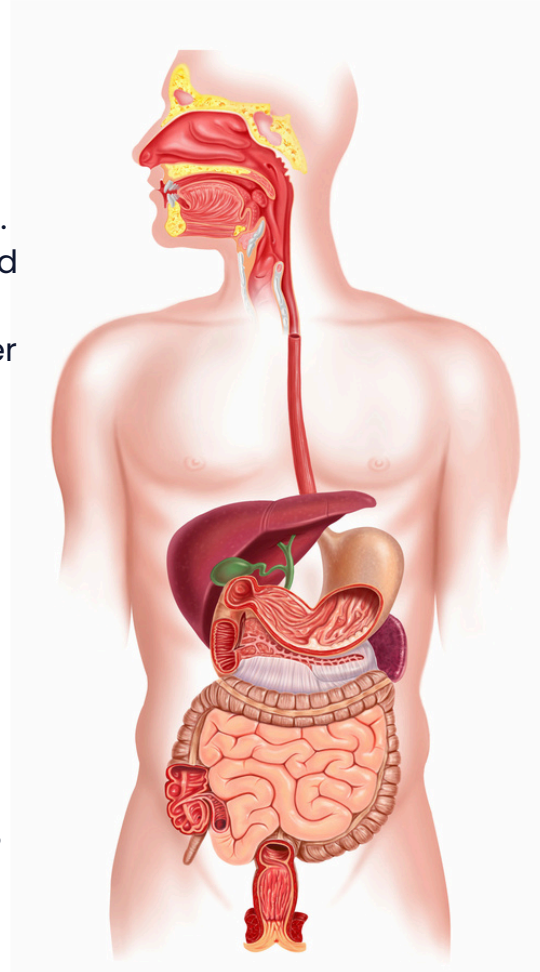
Here are few examples:

**Digestion:** The process of breaking down food and absorbing nutrients is essential for our overall health. But what if our gut health is compromised? This could not only lead to digestive issues like bloating, constipation, or discomfort but can also impact other areas of our health.

**Mental health:** A significant portion of our body's serotonin, a neurotransmitter that contributes to feelings of happiness and well-being, is produced in the gut. Therefore, issues with gut health can potentially impact our mood and contribute to conditions like depression and anxiety (2).

**Immunity:** Our immune system is intricately linked with our digestive system. In fact, approximately 70% of our immune cells are located in our gut. This means that any disruption in the gut can directly influence our immunity, making us more susceptible to infections and diseases (3).

The beauty of IFN's systems biology approach is its capacity to connect the dots between different body systems, providing a holistic view of an individual's health. It is through this understanding that IFN practitioners can create comprehensive and effective strategies to enhance health and well-being.



1. Hood L, Balling R, Auffray C. (2012). Revolutionizing medicine in the 21st century through systems approaches. *Biotechnology Journal*.

2. Yano JM, Yu K, Donaldson GP, Shastri GG, Ann P, Ma L, Nagler CR, Ismagilov RF, Mazmanian SK, Hsiao EY. (2015). Indigenous bacteria from the gut microbiota regulate host serotonin biosynthesis. *Cell*.

3. Vighi G, Marcucci F, Sensi L, Di Cara G, Frati F. (2008). Allergy and the gastrointestinal system. *Clinical and Experimental Immunology*.



# Root Cause Resolution

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One of the defining principles of Integrative and Functional Nutrition (IFN) is its focus on root cause resolution. Unlike conventional models that often target symptoms alone, IFN seeks to uncover and address the underlying reasons for health problems. This strategy aims for long-lasting health improvements, rather than temporary relief of symptoms (1).

Consider headaches, for example. In a conventional approach, the immediate response might be to recommend over-the-counter pain relievers. While these can be effective at relieving pain in the short term, they don't address the underlying cause of the headaches.

IFN, on the other hand, asks, "Why are the headaches happening?" Could it be due to dehydration? A certain food intolerance? Stress? Hormonal imbalances? By diving deeper, an IFN practitioner can help you identify the root cause of the issue and provide strategies to address it.

This root cause resolution approach treats symptoms as clues to deeper imbalances within the body. They are signals that something is off balance and needs attention. Symptoms, from this viewpoint, are not problems to be suppressed but rather messages to be understood (2).

By identifying and addressing the root causes of health issues, IFN aims to restore balance in the body and promote sustainable health improvements. This is an empowering approach, allowing individuals to take control of their health, understanding their bodies better, and making informed decisions about their health and well-being.

**"Rather than slapping on a diagnosis and giving an 'off-the-shelf' drug, we need to dig deeper and look at the whole person, the lifestyle, the stress — the root cause."**

**– Dr. Deanna Minich**

1. Bland JS, Minich DM. (2021). Personalized Lifestyle Medicine: Applying the Science of Nutrigenomics. Journal of Lifestyle Medicine.

2. Bland JS. (2017). The Disease Delusion: Conquering the Causes of Chronic Illness for a Healthier, Longer, and Happier Life. Harper Wave.

# Therapeutic Relationship

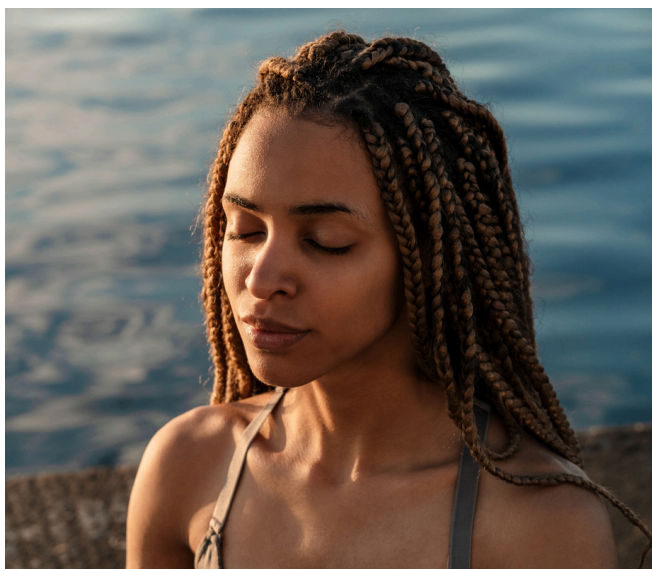
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The Integrative and Functional Nutrition (IFN) model places immense value on the relationship between the practitioner and the patient. This relationship is not just about prescribing a diet or treatment plan; it is about building an alliance that fosters empowerment, education, and self-care (1).

**Empowerment:** The goal of an IFN practitioner is not just to provide care, but also to empower individuals to take charge of their own health. This means equipping patients with the knowledge, skills, and confidence to make healthy decisions and changes in their lifestyle. Practitioners do this by providing personalized guidance, supporting individuals in their journey, and celebrating their victories along the way (2).

**Education:** Knowledge is power when it comes to health. That's why education is a crucial part of the IFN approach. Practitioners strive to ensure that individuals understand their health conditions, the factors that contribute to them, and the steps they can take to improve their health. This might include education on nutrition, lifestyle habits, and how different factors interact to affect health (3).

**Self-care:** The IFN approach understands that caring for oneself is an integral part of health and wellness. This might include developing healthy eating habits, practicing regular physical activity, ensuring restful sleep, managing stress, and nurturing emotional health. IFN practitioners provide strategies and support for self-care, understanding that it plays a critical role in maintaining health and preventing disease (4).



1. Jones DS, Quinn S (2010). Textbook of Functional Medicine. Institute for Functional Medicine.

2. Minich DM, Bland JS (2013). Personalized lifestyle medicine: relevance for nutrition and lifestyle recommendations. The Scientific World Journal.

3. Egger G, Binns A, Rossner S. (2009). The emergence of "lifestyle medicine" as a structured approach for management of chronic disease. The Medical Journal of Australia.

4. Hassed C. (2008). The essence of health: the seven pillars of wellbeing. Random House Australia.



# Application in Practice

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## Case Studies:

Case studies are a compelling way to illustrate the practical application and efficacy of Integrative and Functional Nutrition. By examining real-life examples, we can better understand how this approach can address common health issues such as diabetes, autoimmune disorders, and heart disease.

### Type 2 Diabetes

Consider a patient with type 2 diabetes. Conventional treatment may primarily involve medication to control blood sugar levels. However, an IFN practitioner would delve deeper to understand the root causes contributing to the patient's condition, such as poor diet, sedentary lifestyle, or high-stress levels. A personalized plan might involve dietary changes, exercise, stress management techniques, and targeted supplements, alongside medication if needed. The goal is not only to manage blood sugar levels but to improve overall health and quality of life.

### Autoimmune Disorder

Similarly, a patient with an autoimmune disorder may benefit from an IFN approach that addresses gut health, considering the growing evidence of the connection between the gut and the immune system.

### Heart Disease

A patient with heart disease may find improvement through a comprehensive plan that addresses diet, exercise, stress, and sleep—factors that all play a role in cardiovascular health.

These cases illustrate how IFN goes beyond symptom management to address the root causes of health problems and improve overall wellness.



## Dietary Principles:

IFN's dietary principles are not about quick-fix diets or restrictive eating. Instead, they emphasize a wholesome and sustainable approach to nutrition.

### Whole Foods

A central tenet of IFN is the importance of whole foods, minimally processed and rich in nutrients. These include fruits, vegetables, lean proteins, whole grains, and healthy fats. Such foods provide the array of nutrients our bodies need to function optimally.



**"Whole foods offer not just essential nutrients but a comprehensive array of health boosters, like fiber, phytonutrients, and a balanced combination of fats, protein, and carbs. These foods form the cornerstone of a vibrant, health-supporting diet." -**

**Dr. Deanna Minich**

### Nutrient Density

Nutrient density means choosing foods that provide a high amount of nutrients relative to their calorie content. For example, a cup of spinach is more nutrient-dense than a cup of chips, as it provides a wider array of vitamins, minerals, and other health-promoting compounds for a similar number of calories.

### Gut Health

Maintaining a healthy gut microbiome is also crucial. Our gut microbiota plays a pivotal role in many aspects of health, from digestion and nutrient absorption to immune function and even mood regulation. Foods that promote a healthy gut microbiome include those rich in fiber, like whole grains, fruits, and vegetables, as well as fermented foods like yogurt and sauerkraut.



## Lifestyle Modifications:

IFN recognizes that diet is just one piece of the health puzzle. Other lifestyle factors play a critical role in our well-being and are integral to the IFN approach.

### Sleep

Sleep is essential for health. Poor sleep can contribute to a range of health problems, from weight gain and poor mental health to an increased risk of chronic diseases. IFN practitioners provide strategies to improve sleep quality and address any underlying issues that may be affecting sleep.



### Stress Management

Stress management is another critical aspect. Chronic stress can negatively impact almost every system in the body and contribute to a variety of health problems. IFN emphasizes strategies to manage stress, such as mindfulness, yoga, and other relaxation techniques.

### Physical Activity

Physical activity is also crucial. Regular exercise can help control weight, reduce the risk of chronic diseases, improve mental health, and boost overall well-being. IFN practitioners help individuals find forms of exercise that they enjoy and can maintain long-term.

### Socialization

Social connections also play a role in health. Having strong, supportive relationships can help manage stress, improve mental health, and contribute to a longer, healthier life. IFN practitioners recognize the importance of this aspect and may provide strategies to foster social connections.



## Key Takeaways

**IFN is a personalized approach to health:** Rather than a one-size-fits-all model, IFN acknowledges that each person has unique nutritional and health needs, influenced by genetics, lifestyle, and environment.

**Systems biology is at the heart of IFN:** IFN recognizes the interconnected nature of the body's systems, understanding that a problem in one area can affect others. This holistic approach considers the whole person, not just isolated symptoms or conditions.

**Root cause resolution is central to IFN:** IFN aims to address the underlying causes of health issues, rather than merely suppressing symptoms. This approach treats symptoms as signals of deeper imbalances that need to be addressed to restore optimal health.

**The therapeutic relationship is integral to IFN:** A relationship of partnership between practitioner and patient is key, fostering empowerment, education, and self-care.

**IFN extends beyond diet:** While nutritional recommendations are key to IFN, other aspects of lifestyle, such as sleep, stress management, physical activity, and social connections, are also crucial to achieving optimal health.

**"Functional Nutrition emphasizes the importance of high quality foods and phytonutrient diversity to address clinical imbalances and move individuals toward the highest expression of health. It's about more than just eating the right foods. It's about learning to live the right way."**

**– Kathie Swift**





## Avocado Lime Salmon

Yield: 4 Servings

Prep Time: 15 minutes    Total Time: 30 minutes

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### Ingredients:

- 1 1/2 lb salmon, skinless
- 1 Clove garlic, minced
- 1 tsp olive oil
- salt, to taste
- pepper, to taste
- 2 tsp paprika
- 1 avocado, chopped
- 1 red onion, chopped
- 4 Tbs cilantro, fresh, chopped
- 4 Tbs olive oil
- 4 Tbs lime juice

### Instructions:

1. Preheat oven to 400°F.
2. On a baking sheet, season salmon with garlic, 1 teaspoon olive oil, salt, pepper, and paprika.
3. Bake for 10–12 minutes.
4. In a small bowl, mix avocado topping ingredients until fully incorporated. Don't overmix or you'll break down your avocado.
5. Spoon avocado topping over the salmon.



## Quinoa and Black Bean Salad

Yield: 6 Servings

Prep Time: 15 minutes Total Time: 25 minutes

### Ingredients:

- 1 1/2 cups quinoa
- 1 1/2 cups black beans, canned, rinsed and drained
- 1 1/2 cups corn, frozen, defrosted
- 1 medium bell pepper, red, seeded and chopped
- 4 medium scallions, chopped
- 1 tsp garlic, finely minced
- 1/4 cup cilantro, fresh, chopped fine
- 1/4 tsp cayenne pepper optional
- 1/3 cup lime juice
- 1/2 tsp salt
- 1 1/4 tsp ground cumin
- 1/4 cup olive oil
- salt and pepper to taste

### Instructions:

#### Prep

1. Rinse quinoa in a fine sieve under cold running water until water runs clear. Put quinoa in a pot with 2 1/4 cups water. Bring to a boil, then cover and simmer 20 minutes or until water is absorbed and quinoa is tender. Fluff quinoa with a fork and transfer to large bowl and allow to cool.

#### Make:

1. Once quinoa has cooled, add beans, corn, bell pepper, scallions, garlic, cilantro, and cayenne (if using) and toss to combine.
2. In a small bowl whisk together lime juice, salt, cumin and add oil in a stream while whisking. Drizzle over salad and toss well. If desired, add salt and pepper, to taste.



## Blueberry Banana Smoothie

Yield: 1 Servings

Prep Time: 5 minutes    Total Time: 5 minutes

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### Ingredients:

- 1 cup almond milk, unsweetened (or other non-dairy beverage)
- 1/2 cup ice cubes
- 1 banana
- 1/4 cup blueberries
- 2 Tbs flaxseed, milled
- 1 Tbs oats, quick
- 1 tsp honey
- 1/8 tsp cinnamon

### Instructions:

1. Add all ingredients into a blender and process until smooth.
2. Serve immediately.





## Crispy Spiced Air Fryer Chickpeas

Yield: 4 Servings

Prep Time: 5 minutes    Total Time: 15 minutes

### Ingredients:

- 15 oz chickpeas, drained and rinsed
- 1 Tbs olive oil
- 1/4 tsp sea salt
- 1/2 tsp smoked paprika
- 1/2 tsp garlic powder

### Instructions:

#### Prep

1. Preheat air fryer to 375° Drain and rinse the chickpeas.
2. Spread out on a large clean dish towel and light pat dry.
3. Transfer chickpeas to a medium bowl with olive oil, salt and spices, tossing to coat completely.

#### Make

1. Add the chickpeas to the fryer basket and shake to spread out in a single layer.
2. Cook 10 minutes (or until browned and crispy) shaking once about halfway through.



# Interested in learning more?

*Let's  
Connect!*



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