



**Penn**  
Dental Medicine



## **Nutrition eBook: How Are Nutrition and Oral Health Connected**

**An Informative Brochure Prepared by Penn Dental Medicine**



## Intro: How Are Nutrition and Oral Health Connected?

When you think about maximizing oral health, what comes to mind? For many, the answer is regular brushing and flossing. Others may think about the importance of maintaining routine dental checkups and cleanings. While all of these contribute to optimum dental health—so does what you eat!

Many studies have explored the connection between nutrition and oral health. One of the most profound links is poor nutrition leading to periodontal disease. Periodontitis develops as a result of bacteria and inflammation of the teeth and gums. Furthermore, this condition has been shown to produce cardiovascular problems such as heart disease, arterial blockages, and stroke. In addition, studies have shown that blood cell disorders, diabetes, and systemic diseases are also linked to periodontal disease.

Balanced nutrition and healthy eating patterns not only help to ensure positive oral health but also play a major role in your overall health and wellness.



This eBook is designed to help you understand the current nutritional guidelines and how to achieve them. You'll be able to refer to go-to nutritional tips and find out how your healthcare provider and registered dietitian can empower you to make positive changes in your eating patterns.

# Chapter One:

## The Relationship Between Nutrition Requirements and Oral Health

According to the Academy of American Nutrition and Dietetics, three-fourths of the population has an eating pattern that doesn't include enough vegetables, fruits, dairy, and healthy oils. It's also been found that the majority of Americans exceed the nutritional requirements when it comes to added sugars, sodium, and saturated fats.

When people don't consume enough of the right kind of foods, combined with eating those that are more harmful—such as sugar—it can lead to the growth of oral bacteria. This bacteria eventually form into plaque, which leads to cavities and tooth decay.

How do you know what the right kind of foods are to support optimal oral health? Take a look:



### Low-Fat Dairy

Dairy foods and drinks such as low-fat or fat-free milk, cheese, and yogurt are rich in calcium which is proven to promote strong teeth and gums. However, use caution because some low-fat dairy products have added sugars to replace the flavor.





## Fresh Fruits and Vegetables

Many fruits and vegetables are rich in fiber and/or vitamin C. Vitamin C is especially important in boosting gum health and promoting saliva production. For a fiber boost, integrate more carrots and celery into your meals. Apples, pears, pineapples, pears, cucumbers, and tomatoes are all rich in vitamin C. Oranges contain both fiber and vitamin C, but should be eaten in moderation. This is because citrus fruit, while providing plenty of vitamin C is also acidic, which consumed abundantly may harm the protective enamel of the teeth.\*



## Lean Protein

Lean meat, eggs, fish, nuts, and other lean protein sources often contain phosphorus. Consuming this mineral, much like calcium, helps to strengthen the teeth.



## Whole Grains

Whole wheat bread, brown rice, and oatmeal are examples of oral-health friendly whole grains.





## Legumes

Beans are another food source containing tooth-fortifying phosphorous. And, they're a great source of fiber.

Not only do the foods listed above promote healthy teeth and gums, they're also helpful in maintaining a healthy weight and providing you with vitamins and minerals needed for daily wellness.

*\*While fresh fruit is tasty and healthy, be cautious when eating dried fruits. Many dried fruits and other sticky types of food tend to rest on the teeth longer. If you do indulge in sticky treats, drink water and try to brush your teeth after.*





## Chapter Two: Five Tips for Incorporating Optimal Nutrition for Positive Oral Health

Now that you've been introduced to optimal oral-health nutritional guidelines, check out a few helpful tips and strategies for applying healthy eating patterns:

### 1. Limit Snacking

If you decide to snack, consider one of the items from the previously mentioned optimal oral-health food list. However, although the midmorning munchies and late-afternoon doldrums may entice the urge to snack, doing so can put your teeth in peril. The more you eat between meals, the more likely it is for acid to produce bacteria that stays on the teeth.



## 2. Avoid Sugar

Sugar isn't simply a byproduct of candy and cupcakes. Sugar sneaks into many carbohydrates and packaged foods (crackers, chips, etc.). Juice and soda are also major culprits when it comes to hiding hefty amounts of sugar. Check the labels of your food for hidden sources of sugar, including: corn syrup, honey, dextrose, and fructose

## 3. Drink Water

Although recommended water consumption varies, depending on sex, age, weight, and other factors, health providers encourage drinking water daily—and plenty of it. While helping to keep you hydrated, encourage a healthy weight, and regulate your body temperature, drinking water keeps harmful acids and bacteria at bay.

## 4. Visit ChooseMyPlate.gov

Already feeling overwhelmed by what to eat, what not to eat, and how to incorporate new healthy meals into your routine? Don't worry! Visit [ChooseMyPlate.Gov](https://www.choosemyplate.gov) for customizable insights into what type of foods and beverages are best for you and your family's oral and overall health. We'll provide some other helpful resources for you at the end of this eBook as well.

## 5. Stay Fresh

While there are plenty of options for canned fruits, vegetables, beans, and even meats, staying with fresh foods whenever possible is always best. Canned and packaged goods can be loaded with preservatives and additives—sugar and sodium in particular. However, frozen fruits and vegetables can be a positive alternative when fresh isn't possible; frozen at the peak of ripeness, they are full of nutrients, but can be easily stored in the freezer so you don't have to worry about them going bad quickly. Instead, you can just thaw out the portion you need to easily add fruits or vegetables to any meal.



*\*To help keep track of your daily sugar intake, the USDA guideline states that sugar should only make up 10 percent of your daily calories. Instead of that oh-so-sweet coffee or soda, grab water with a slice of lemon instead.*

## Chapter Three: Healthcare Providers and Registered Dietitians Work Together For Your Health

Do you feel ready to make a move toward better nutrition, but aren't sure where to begin? With increased knowledge of how strongly nutrition impacts oral and overall health, healthcare providers are making concerted efforts to work together—for your best health! This is especially true for the professional partnership between dentists and dietitians.

A registered dietitian can do more than simply advise you on the best types of foods and nutrition for optimal oral health, they also provide:

- Nutrition consultations that are customized to your specific needs
- Disease management to keep conditions such as high blood pressure, diabetes, autoimmune disorders, and others in check
- Weight loss strategies and maintenance tips
- Meal planning that focuses on your individualized nutrition needs
- Pregnancy eating-pattern guidelines
- Pediatric and teen eating-pattern guidelines

And, a registered dietitian, with your permission, can work collaboratively with your dentist to ensure best oral health practices and outcomes.







## Next Steps

You can start your journey toward best nutrition and oral health practices today! Remember, your dentist, a registered dietitian, and a number of additional resources are at your disposal.

To help you achieve nutritional goals for positive oral health, check out these five helpful organizations:

- **Academy of Nutrition and Dietetics:** <https://www.eatright.org/>
- **American Heart Association:** <https://www.heart.org/>
- **Office of Disease Prevention and Health Promotion:**  
<https://health.gov/dietaryguidelines/>
- **USDA Choose My Plate:** <https://www.choosemyplate.gov/>
- **American Dental Association:** <https://www.mouthhealthy.org/en>





It's important for you to be patient with yourself. Start with small steps—increasing your water intake, substituting chips with crunchy carrots. Before you know it, you'll be feeling better and your smile will show it!

We also welcome you to reach out to Penn Dental Medicine. Our teaching clinic provides comprehensive care by students trained by industry-leading University of Pennsylvania doctors. As a patient of PDM, you are eligible for our dietitian services that are currently free of charge. Additionally, you'll be offered a discounted price, but with the highest quality of dental care, with a wide range of dental service options—including helping you establish a nutritional plan for positive oral health.

