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**Microbes are us:** Diseases and nutrition.

9-12 Daily serving for children and adults

Red meat, sugary food (1)

Eggs, plant proteins, soy + cheese + yogurt (1-2)

Whole legumes, Nuts and seeds, Fish, Chicken (2-4).

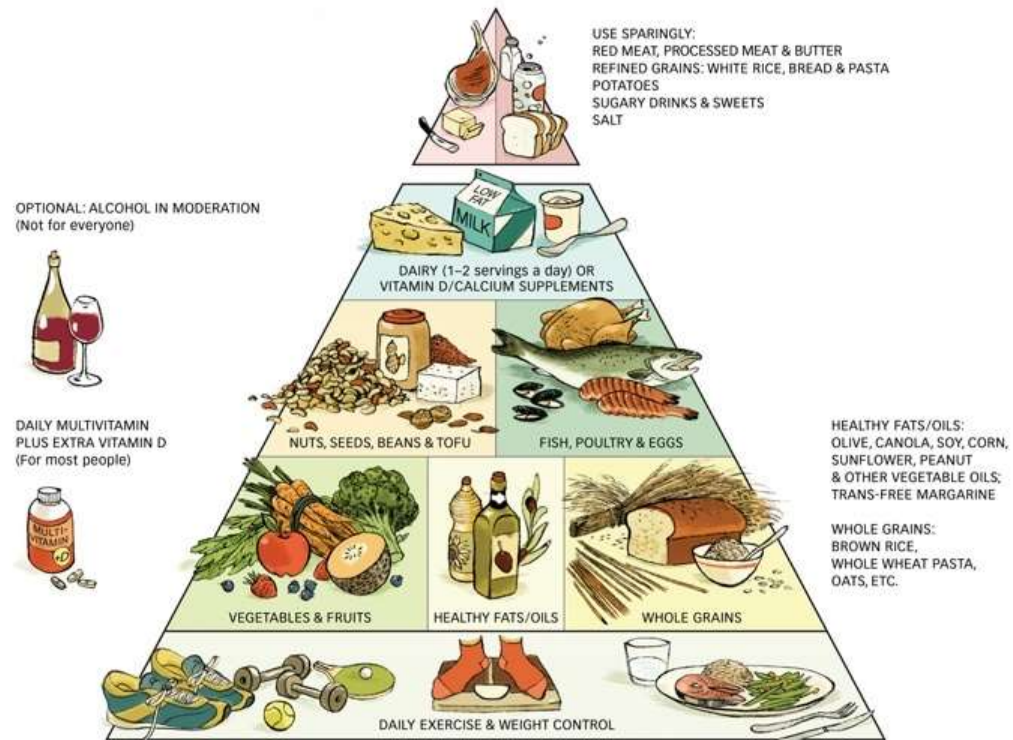
Vegetables, Fruit (2-3), plant oils, Whole Grain + Rice + Pasta (1-2)

Warm Water 6-8 glasses, Exercise (home, office, Gym)

Click on this image to download a large PDF of the Healthy Eating Pyramid, or scroll down to read more

## THE HEALTHY EATING PYRAMID

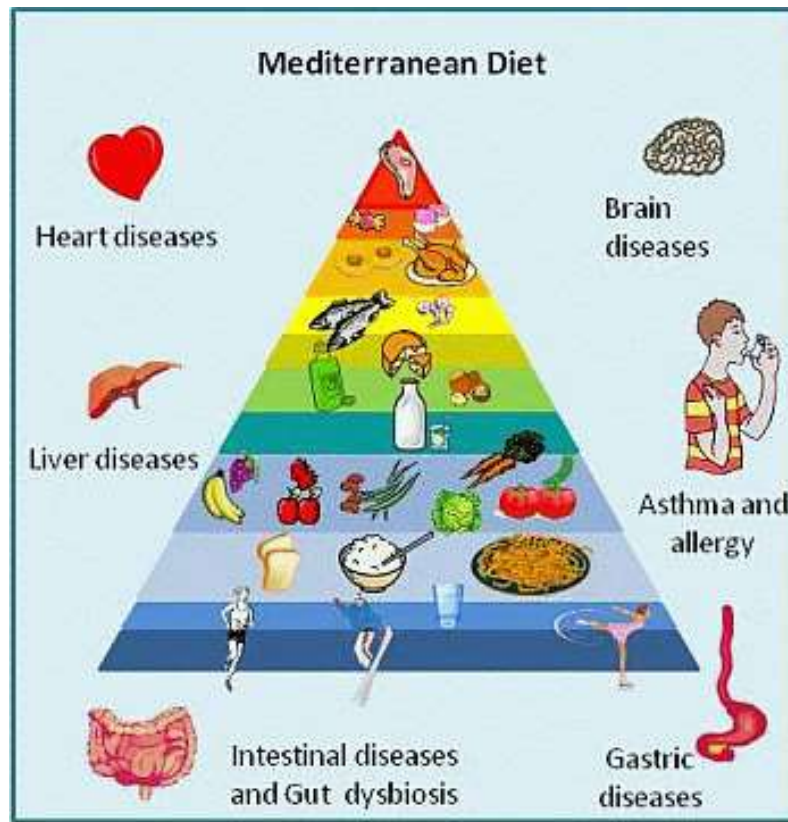
Department of Nutrition, Harvard School of Public Health



For more information about the Healthy Eating Pyramid:  
[WWW.THE NUTRITION SOURCE .ORG](http://WWW.THE NUTRITION SOURCE .ORG)

*Eat, Drink, and Be Healthy*  
by Walter C. Willett, M.D. and Patrick J. Skerrett (2005)  
Free Press/Simon & Schuster Inc.

# A Mediterranean Diet will help fend-off Diseases



Warm Water 6-8 glasses, Exercise (home/office/gym), meditation for stress, and a Mediterranean Diet.

Del Chierico F, Vernocchi P, Dallapiccola B, Putignani L. Mediterranean diet and health: food effects on gut microbiota and disease control. *Int J Mol Sci.* 2014 Jul 1;15(7):11678-99.

# Ginger Tea and Turmeric Milk (Cold, Cough, Inflammation, pneumonia)



## Ginger :

Take some peeled and washed raw ginger (piece or minced)/2-3 times a day. In addition, you may also add water in a pan, more ginger (and/or 3-5 mint leaves) and boil it for 2-5 min. Tea is optional. Turn off and brew for 2min. Strain the leaves. Add honey as needed.

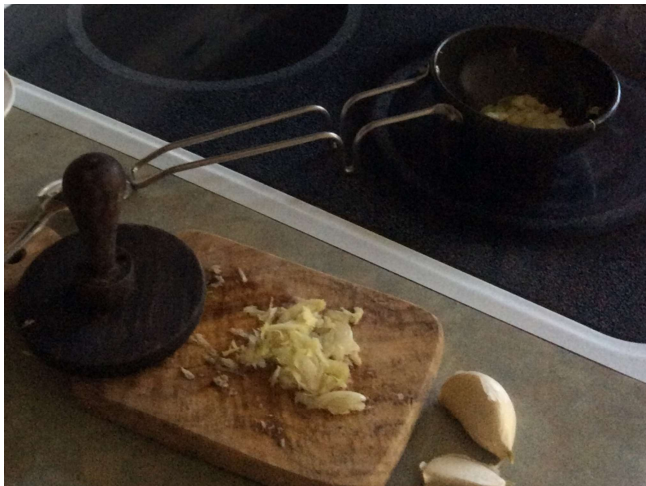
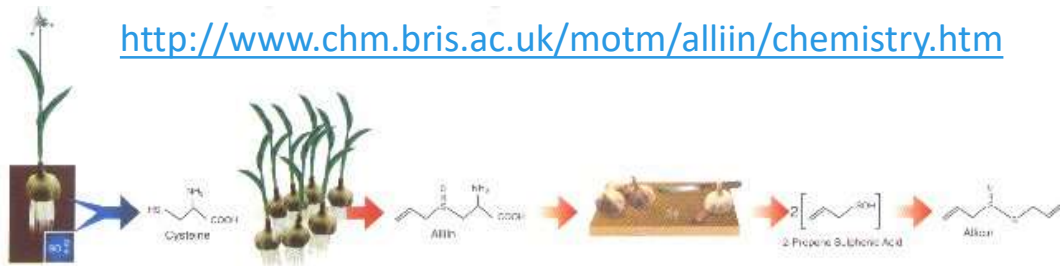
## Turmeric (Coconut) Milk :

1 inch-long stick of turmeric that is ground or turmeric powder  
Peppercorns  
Cinnamon  
Some coconut milk or milk  
1 inch-long piece of ginger, minced  
Raw honey (optional)  
½ teaspoon ghee (optional, for sore throat or cough). Boil, and keep on low flame for 15min to 30min.

Peterson CT, etc. Effects of Turmeric and Curcumin Dietary Supplementation on Human Gut Microbiota: A Double-Blind, Randomized, Placebo-Controlled Pilot Study. J Evid Based Integr Med. 2018 Jan-Dec;23:2515690X18790725

# How does the Microbiome Diet Works ?

<http://www.chm.bris.ac.uk/motm/alliin/chemistry.htm>



**Garlic everyday in the night-** Garlic is loaded with inulin and FOS (Fructo-oligosacchrides).

**Recipe:** One-Two Raw Garlic, minced. Leave for at least 15mins. Sauté very lightly in olive oil, and eat with food and yogurt etc.

The prebiotic fiber is correlated with **decreased body fat, blood sugar, serum cholesterol and hypertension.**

Filocamo A, etc. Effect of garlic powder on the growth of commensal bacteria from the gastrointestinal tract. *Phytomedicine*. 2012 Jun 15;19(8-9):707-11.

## Brussel Sprouts, Broccoli, and Cabbage for Cancer, Cholesterol, etc.



They all have soluble fibers.

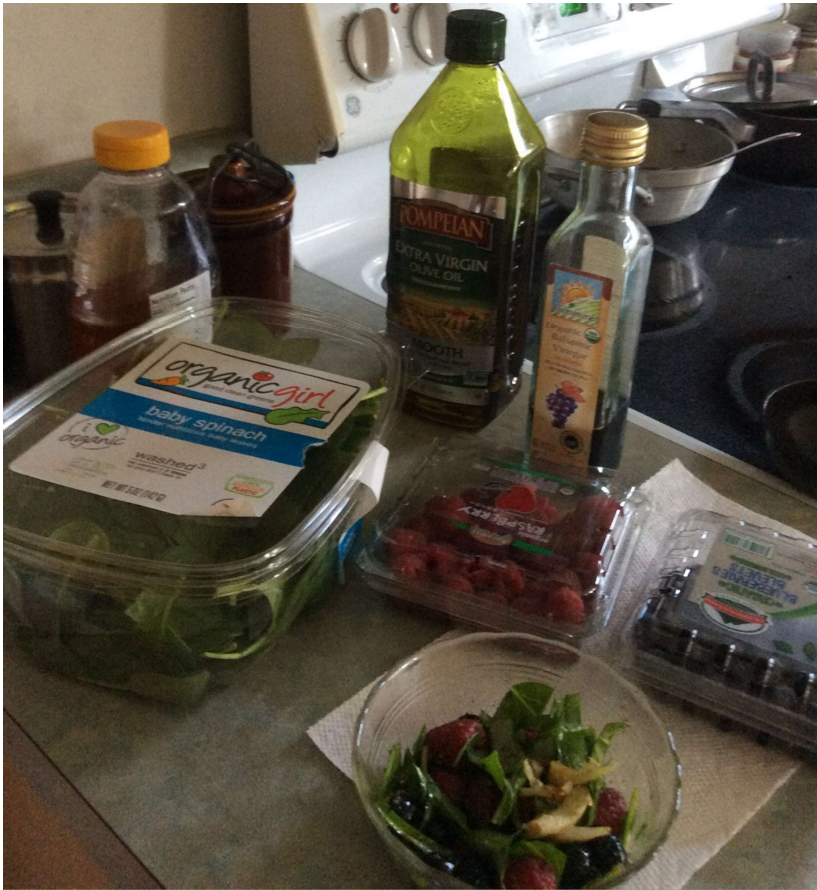
### Directions for Brussel Sprouts :

Preheat oven to 400 degrees F. Wash BS. Cut off the brown ends of the Brussels sprouts and pull off any yellow outer leaves. Cut into half's. Mix them in a bowl with Extra Virgin olive oil, kosher salt, 3-5 garlic and pepper. Pour them on a sheet in a pan and roast for 9 minutes. Remove the garlic. Turn the Brussel Sprouts upside down and bake for 9 more min or until crisp on the outside and tender on the inside.

1) Yanaka A. Daily intake of broccoli sprouts normalizes bowel habits in human healthy subjects. J Clin Biochem Nutr. 2018 Jan;62(1):75-82.

2) C. L. Ho, etc., Engineered commensal microbes for diet-mediated colorectal-cancer chemoprevention. Nat. Biomed. Eng. 2018; 2:27-37.

## Fruit / Vegetable Salads to prevent intestinal inflammation and enhance gut health.



### Salad:

Baby spinach and berries like Blackberries, Raspberries, Blueberries with

**Pesto:** 1 cup mince Sweet Basil, Minced Garlic 3-4 (keep for 15min),  $\frac{1}{4}$  walnuts/pine nuts,  $\frac{1}{4}$  extra olive oil, salt, pepper,  $\frac{1}{4}$  parmesan cheese. Mince in a blender).

Or you may use **balsamic vinegar** and extra virgin olive oil. Dates are also great for Diabetes.

Klinder A, Shen Q, Heppel S, Lovegrove JA, Rowland I, Tuohy KM. Impact of increasing fruit and vegetables and flavonoid intake on the human gut microbiota. *Food Funct.* 2016 Apr;7(4):1788-96.

# Fermented foods are probiotic and natural live bacteria for healthy digestion



**Recipe:** Yogurt, cut cucumber, salt, mango powder, roasted cumin-ground, coriander leaves

- ❑ **Fermented foods** like sauerkraut, pickles, kimchi, kefir, unprocessed yogurt, and kombucha are all great choices, and a daily probiotic.
- ❑ **These foods are live microorganisms crucial to healthy digestion.** Lactic acid bacteria (LAB) are in fermented foods, but other bacteria as well as yeast and fungi also contribute to food fermentations.

Victoria Bell, etc. *Foods*. 2018 Dec; 7(12): 195. *One Health, Fermented Foods, and Gut Microbiota*



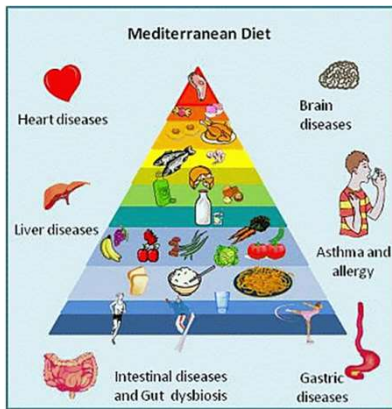
# Meditation and Exercise



# Conclusions

Our body, especially the gut microbiome, needs sustenance to fight off diseases.

The brain and body need nourishment to concentrate and remain healthy. Therefore, fortifying appetizers, no-stress meditation, and exercise are needed for a great life!



Thank you!



# Acknowledgements

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- ❑ **Laura M. Schmitt**, Former Communications Director, Bioengineering, University of Illinois at Urbana-Champaign.

# References

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- ❑ Filocamo A, etc. Effect of garlic powder on the growth of commensal bacteria from the gastrointestinal tract. *Phytomedicine.* 2012 Jun 15;19(8-9):707-11
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- ❑ Victoria Bell, etc. *Foods.* 2018 Dec; 7(12): 195. One Health, Fermented Foods, and Gut Microbiota
- ❑ Heinerman J. *Heinerman's Encyclopedia of Fruits, Vegetables, and Herbs.* 1988