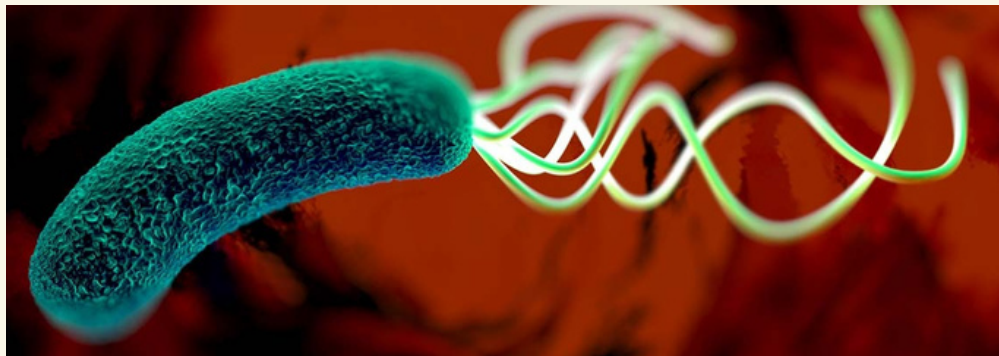


# Diet for Managing *Helicobacter pylori* Levels

Quick Reference Guide



*Helicobacter pylori* populations can be managed through diet.

Dietary interventions are reasonable to consider as standalone management of mild or asymptomatic cases. Diet can also be incorporated into any *H. pylori* treatment protocol.

Generally, a diet low in micronutrients is a risk factor for *H. pylori* infection. Diets high in fruits, vegetables and fiber have shown protective effects.

Smoking, alcohol, and hyperglycemia have been found to be risk factors in *H. pylori* infection.

Proper dietary modifications for *H. pylori* can have the following actions:

- Bactericidal/Bacterostatic
- Control growth, virulence, and expression of *H. pylori*
- Immune modulation
- Anti-inflammatory
- Antioxidant
- Anti-adhesive
- Mucosal repair & protection

## What to Eat Less of

| Food Categories to Avoid   |   |
|--|---|
| <b>Foods categories shown to promote <i>H. pylori</i> colonization and virulence</b> | High salt   |
|  | High nickel – Cocoa and chocolate, soy beans, oatmeal, nuts (especially almonds), fresh and dried legumes |
|  | Smoked, pickled, salt-preserved foods   |
|  | Nitrites  |

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### *What to Eat More of*

Quick Reference Guide

| Fruits   | Actions   |
|--|---|
| Berries: blueberry, bilberry, elderberry, cranberry, raspberry, strawberry | Bacteriostatic in vitro, may increase susceptibility to clarithromycin and other antibiotics, anti-adhesive         |
| Cranberry  | Anti-adhesive   |
| Grapes – Especially red  | Anti-adhesive, anti-inflammatory, antioxidant, immune modulating  |
| Pomegranate  | Anti-inflammatory   |
| Apple  | Anti-inflammatory   |
| Vegetables Cruciferous   | Actions   |
| vegetables: broccoli, broccoli sprouts, cabbage, cabbage juice, radish     | Bactericidal/static, mucosal healing, anti-inflammatory, antioxidant, may increase susceptibility to antibiotics    |
| Pepper: red bell & hot red   | Bactericidal, antioxidant   |
| Garlic   | Bactericidal  |
| Algae & sea vegetables   | Antioxidant, mucosal repair & protection  |
| Burdock  | Synergistic with other <i>H. pylori</i> treatment   |
| Oils – Away from Food  | Actions   |
| PUFAs, especially linolenic acid (flax oil)                                | Strong anti- <i>H. pylori</i> activity in vitro, reduce risk of atrophic gastritis                                  |
| Fish oil   | Anti-adhesive, anti-inflammatory  |
| Garlic oil   | Bactericidal  |
| Black currant seed oil   | Bacteriostatic in vitro   |
| Carrot seed oil  | Bacteriostatic in vitro   |
| Grapefruit seed oil  | Bacteriostatic in vitro   |
| Monolaurin   | Bactericidal/static   |
| Dairy  | Actions   |
| Yogurt   | Anti-inflammatory, immune modulator   |
| Colostrum  | Immune modulating   |
| Lactoferrin  | Anti-inflammatory, reduces <i>H. pylori</i> colonization & gastritis in vivo, synergistic with antibiotic protocols |
| Honey & Bee Products   | Actions   |
| Propolis   | Anti-inflammatory, antioxidant, bacteriostatic in vitro   |
| Honey  | Anti-inflammatory, inversely associated with <i>H. pylori</i> infection,  |
| Manuka Honey   | bacteriostatic in vitro   |
|  | Anti-inflammatory, urease inhibition, bacteriostatic in vitro   |

## What to Eat More of

| Culinary Herbs and Spices      | Actions   |
|--------------------------------|---|
| Nutmeg                         | Anti-inflammatory   |
| Curcumin                       | Mucosal repair/protection, bacteriostatic, anti-inflammatory  |
| Black cumin seed               | Bactericidal in vitro   |
| Cumin                          | Bactericidal in vitro, anti-inflammatory  |
| Ginger                         | Anti-inflammatory   |
| Borage                         | Anti-inflammatory   |
| Caraway                        | Anti-inflammatory   |
| Oregano                        | Anti-adhesive, bactericidal   |
| Licorice                       | Bactericidal, mucosal repair & protection, anti-inflammatory, anti-adhesive   |
| Thyme                          | Bactericidal  |
| Cinnamon                       | Bactericidal  |
| Peppermint                     | Anti-inflammatory   |
| Nutmeg                         | Anti-inflammatory   |
| Other                          | Actions   |
| Red Wine & resveratrol         | Anti- <i>H. pylori</i> activity in vitro  |
| Fermented Foods                | Anti-inflammatory, immune modulator,  |
| Green tea                      | Bactericidal, anti-adhesive, anti-inflammatory, antioxidant   |
| <i>Lactobacillus</i>           | Anti-inflammatory, immune modulator, decrease side effects of antibiotics, anti-adhesive, secrete anti-microbial products                             |
| <i>Bifidobacteria</i>          | Anti-inflammatory, immune modulator, anti-adhesive, secrete anti-microbial products   |
| <i>Saccharomyces boulardii</i> | Anti-inflammatory, immune modulator, increase eradication rate of antibiotics, decrease side effects, anti-adhesive, secrete anti-microbial products  |
| Important Nutrients            | Actions   |
| Vitamin C                      | Synergistic with other <i>H. pylori</i> treatment, anti-inflammatory, antioxidant, tissue repair, immune modulating, increase efficacy of antibiotics |
| Vitamin E                      | Synergistic with other <i>H. pylori</i> treatment, anti-inflammatory, antioxidant   |
| Vitamin D                      | Inverse relationship w/ <i>H. pylori</i> infection  |
| Selenium                       | Antioxidant, immune modulating  |
| Zinc carnosine                 | Mucosal protection & repair   |
| Iron (if indicated)            | Immune modulating   |

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