

Diet for managing *Helicobacter pylori* levels



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

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What to eat more of:

Fruits	Action
Berries: blueberry, bilberry, elderberry, cranberry, raspberry, strawberry	Bacteriostatic in vitro, may increase susceptibility to clarithromycin and other antibiotics, anti-adhesive
Cranberry	Anti-adhesive
Grapes – <i>Especially red</i>	Anti-adhesive, anti-inflammatory, antioxidant, immune modulating
Pomegranate	Anti-inflammatory
Apple	Anti-inflammatory

Vegetables	Action
Cruciferous 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	Action
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	Action
Yoghurt	Anti-inflammatory, immune modulator
Colostrum	Immune modulating
Lactoferrin	Anti-inflammatory, reduces <i>H. pylori</i> colonisation & gastritis in vivo, synergistic with antibiotic protocols

Honey & Bee Products	Action
Propolis	Anti-inflammatory, antioxidant, bacteriostatic in vitro
Honey	Anti-inflammatory, inversely associated with <i>H. pylori</i> infection, bacteriostatic in vitro
Manuka Honey	Anti-inflammatory, urease inhibition, bacteriostatic in vitro

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What to eat more of:

Culinary Herbs and Spices	Action
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	Action
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	Action
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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