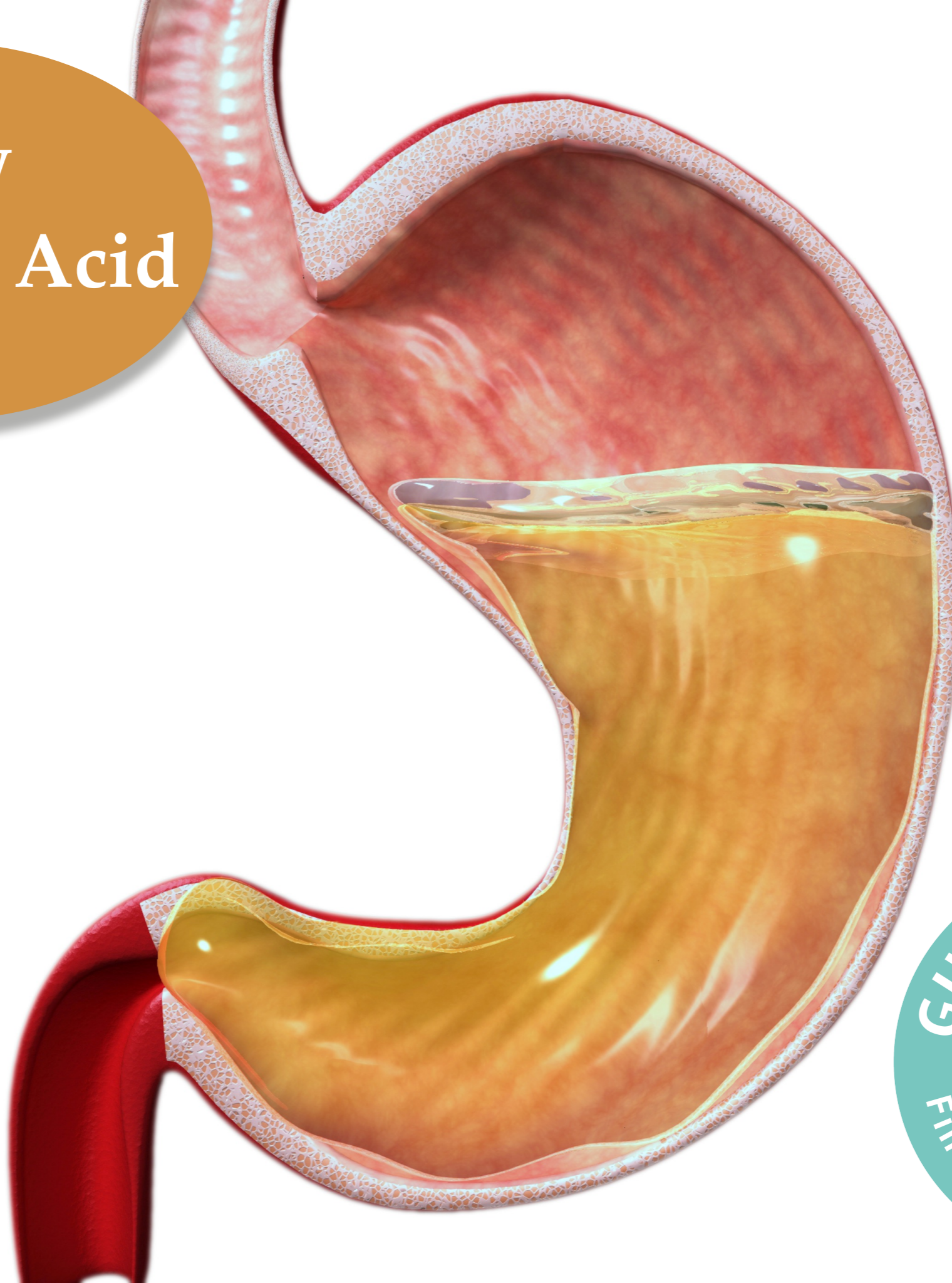


Low
Stomach Acid



Low Stomach Acid

Stomach acid

- Stomach acid is known as hydrochloric acid (HCl for short)
- It is produced by the parietal cells of the stomach walls and activates protein-digesting enzymes
- Stomach acid is one of the most important fluids in the body
- It is needed for many processes of digestive health
- HCl has antimicrobial and antifungal effects
- Supports skin health
- Needed for nutrient absorption - particularly protein
- Vitamin B12, B6, Folate, Iron, Calcium, Magnesium, Zinc, Selenium (important for the thyroid)protein, are released and triggered by stomach acid
- Most cases of acid reflux are due to LOW stomach and not high stomach acid
- Low stomach acid is known as hypochloridria



Some symptoms of low stomach acid

- Acne, spots, eczema
- Water retention
- Abdominal Bloating
- Stomach cramps
- Diarrhea
- Constipation
- Rectal itching
- Candida (yeast infection – skin & nail fungal infections)
- Migraines
- Difficulty in losing weight
- Endometriosis
- Early menopause
- PMS
- Thrush
- Rosacea
- Lack of exercise
- Excess exercise
- Helicobacter pylori (H. pylori) infection
- Urinary tract infections

- Indigestion - burning sensation 30-40mins after meal (often thought to be caused by too much stomach acid, but most times due to low)
- Bloating, gas, burping
- Acid reflux
- Food feels heavy in the stomach
- Undigested food in stools
- Do not feel like eating breakfast
- Do not feel like eating meat

- Anxiety, irritability
- Depression
- Panic attacks
- Poor memory / concentration / impaired brain function
- Bone conditions – osteoporosis
- Gastric ulcers

- Craving for sweets
- Craving acidic foods (citrus, vinegar)
- Sleepy after meals
- Joint pain
- Loss of libido
- Hormone imbalance
- Hair loss (women)

- Dysbiosis (imbalance of gut bacteria)
- SIBO (small intestine bacterial overgrowth)
- Fatigue
- Immunity problems
- Pernicious anaemia (B12 deficiency)
- Tinnitus
- Breathless
- Sinus issues
- Catarrh
- Ear Infections
- Cough
- Bitter taste in mouth
- Gum irritation
- Dry mouth
- Bad breath

- Weak, peeling, or cracked fingernails
- Thread veins around cheek and nose
- Chronic fatigue
- Dizziness
- Flu-like symptoms (sweating and fever)
- Dry skin
- Vitamin & mineral deficiencies
- Nausea
- Multiple food allergies
- Parasites



Low Stomach Acid

Hydrochloric acid is a component of gastric juice produced by cells in the stomach walls

Activates the protein-digesting enzyme, pepsin

Pepsin starts the breakdown of dietary proteins into peptides and amino acids - like cutting the individual pearls from a pearl necklace

To work efficiently, pepsin needs the stomach pH to be 3 or below (high acidity)

When there is low stomach acid, food coming from the stomach to the small intestines is not sufficiently acidic to trigger enzyme secretion to break the food down further

Maldigestion and malabsorption are likely to follow

Stomach acid kills pathogenic bacteria

Low levels may lead to gut microbiome imbalance...

and potential increase of pathogenic bacteria yeasts / fungi



Low Hydrochloric Stomach Acid (HCl)

HCl is reliant on zinc and a number of B vitamins including B6 and B12 for production

Pepsinogen to pepsin
compromised

Protein breakdown
compromised

Amino acid
malabsorption

Hormone production
disrupted: -
Digestion
Reproduction
Neurotransmitters
Thyroid
Blood sugar regulation

Enzyme production
disrupted (all body
processes rely in
enzymes)

Minerals are not ionised
and prepared for
absorption

Calcium, magnesium,
zinc, iron and micro
minerals affected

- Bone conditions
- Fatigue
- Immunity problems
- Others

HCl relies on the
hormones: -

- Histamine
- Gastrin
- Acetylcholine

Antihistamines inhibit HCl

Compromised intrinsic
factor (needed to
activate Vitamin B12)

Vitamin B12 absorption
affected

- Tinnitus
- Pernicious anaemia
- Breathlessness
- Fatigue

Compromised
decongestion of
lymphatic system

Blockage of lymphatic
drainage channels

- Sinus
- Catarrh
- Ear infections
- Cough
- Acne, spots, eczema
- Water retention



www.gutfeelings.uk



Potential root causes of low stomach acid

- **STRESS**
- Eating too quickly
- Poor Diet
- Low B12, B6, Zinc
- Processed foods
- Excess carbohydrates
- Obesity
- Eating large meals
- Smoking
- Excessive exercise
- Low magnesium intake
- Alcohol
- Age

- PPIs (Proton Pump Inhibitors)
- Medications
- Antibiotics
- Antihistamines
- NSAIDs (non steroidal anti-inflammatories) pain killers
- Vegan / Vegetarian or low protein diet
- Bad posture
- Drinking excess water with meals - can dilute stomach acid
- Low hydration - appropriate hydration is needed to produce the fluid of stomach acid



How to
increase
stomach acid

Eat
sitting down
at a table
quietly

Avoid eating
when stressed
(digestive juices and
enzymes slow down
when stressed)

Take some
deep slow
breaths before
eating

Eat slowly

Chew
thoroughly

Avoid large
amounts of water
with a meal - max
200ml - to avoid
diluting stomach
acid

Appropriate
daily hydration -
1.5-2 litres of
water

Have a
teaspoon of lemon
juice or apple cider
vinegar in a teaspoon
of water before
each meal

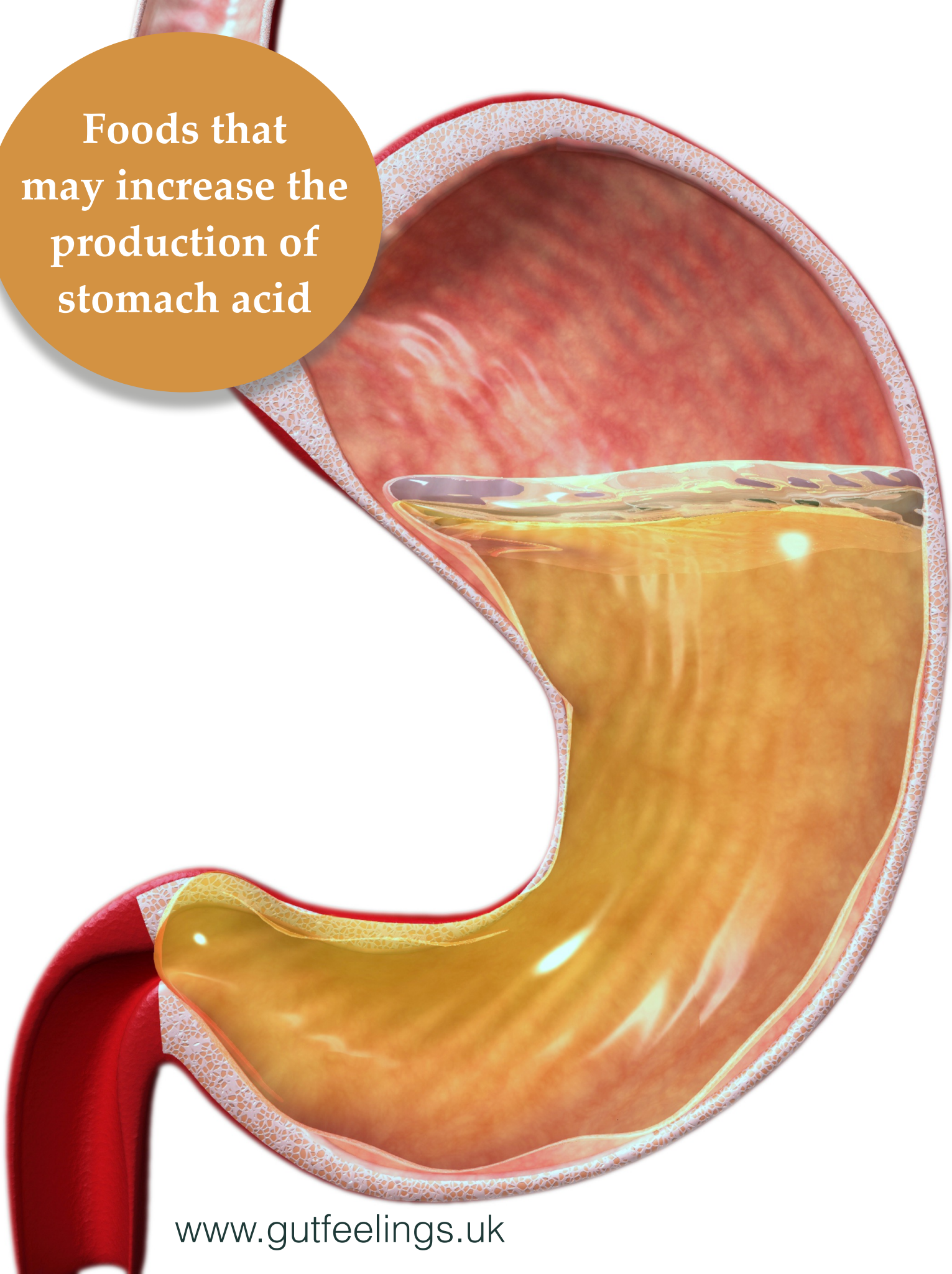
Eat a
handful of
rocket before
a meal

Have
smaller, more
digestible
meals

Reduce
processed foods,
sugar, simple
carbohydrates,
pain killers

Reduce and
manage
STRESS!





Foods that
may increase the
production of
stomach acid

Bitter foods,
which include: -

- Apple Cider Vinegar
- Citrus (lemon)
- Ginger
- Rocket
- Kale
- Radish
- Radicchio
- Globe Artichoke
- Dandelion
- Fennel
- Dill
- Peppermint
- Caraway
- Dark Chocolate



Low Stomach Acid

This diagram illustrates the human digestive system, including the esophagus, stomach, and small intestine. A series of colored, semi-transparent labels are overlaid on the image, each pointing to a specific part of the digestive tract. The labels are: 'Low Stomach Acid' (grey, top), 'Poor Digestion' (dark blue, second), 'Protein & Mineral Deficiency' (red, third), 'Acidic Blood' (teal, fourth), 'Insufficient Nutrients to Produce Stomach Acid' (red, fifth), and 'Poor Digestion' (dark blue, bottom). The background is a dark grey grid.

Poor Digestion

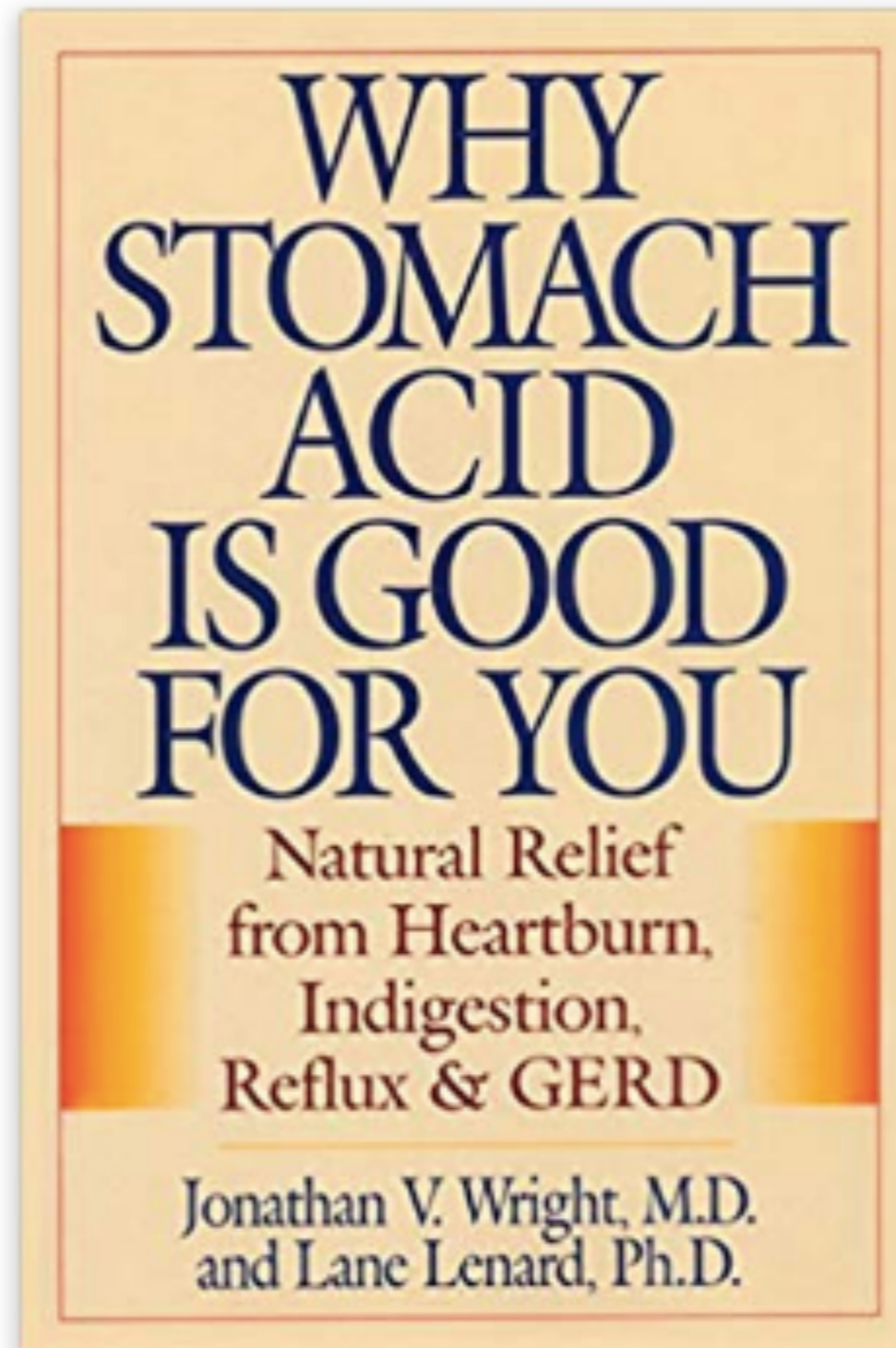
**Protein & Mineral
Deficiency**

Acidic Blood

**Insufficient Nutrients to
Produce Stomach Acid**

Poor Digestion

Recommended
reading



This information is for educational use only, and not a replacement for medical advice. Consult a professional, if you are experiencing symptoms as there may be other root causes

