HEALTH BASICS

Fasting

Fasting is a planned period when you avoid some or all food and drink.

WHAT IT IS
A planned period without some or all food and drink

WHERE IT COMES UP
Blood tests, procedures, religious observance, and eating patterns

WHY IT MATTERS
Changes metabolism, medicine timing, and test or procedure safety

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Ordering clinic, procedure team, pharmacist, or dietitian

HOW IT IS CHECKED
Usually none; timing and intake history

Overview

Fasting means going without some or all food and drink for a set period. It is not a disease or diagnosis.

There is no single definition that fits every situation. A fast may be required before a blood test, operation, or other procedure. It may also be part of a religious practice or a personal eating pattern.

The rules matter. One fast may allow plain water, while another may limit all fluids. Some procedure instructions allow certain clear liquids until a stated time. "Clear liquid" has a medical meaning and does not include every drink that looks transparent.

Intermittent fasting is an eating pattern that alternates between periods of eating and fasting. Examples include eating within a daily time window or fasting on certain days. It describes meal timing, not one standard diet.

Always follow the instructions for your particular test or procedure. General fasting advice should not replace instructions from the service caring for you.

How it works

Food supplies glucose, a simple sugar that cells use for energy. After you eat, the hormone insulin helps move glucose from your blood into cells. The liver and muscles also store some glucose as glycogen.

During a fast, insulin levels fall and the liver releases stored glucose. As the fast continues, the body uses more fat for energy. The liver can turn some fat into chemicals called ketones.

Producing a small amount of ketones during fasting is not the same as diabetic ketoacidosis. Diabetic ketoacidosis is a dangerous complication usually associated with diabetes and requires urgent medical care.

Fasting does not automatically mean going without water. Food restriction and fluid restriction affect the body differently. Avoiding fluids can lead to dehydration, especially in hot weather, during exercise, or during an illness that causes vomiting or diarrhoea.

The effects also depend on the length of the fast, what you eat outside the fasting period, your medicines, and your health. A brief overnight fast for a blood test is different from repeated or prolonged fasting.

Why it matters for your health

Some laboratory results are affected by recent food or drink. A fasting plasma glucose test, for example, measures blood glucose after at least eight hours without food. Other tests may have different instructions. Many blood tests do not require fasting at all.

Eating before a fasting test can make the result harder to interpret. It does not necessarily mean the result is abnormal. Tell the laboratory or ordering clinic what you consumed and when; they can decide whether to continue or reschedule.

Fasting before sedation or anaesthesia helps reduce the chance that stomach contents will enter the lungs. This is called aspiration. Instructions may give separate stopping times for solid food, milk, and clear liquids. Following an older instruction or adding extra fasting time is not necessarily safer, because unnecessarily long fasting can cause discomfort and dehydration.

Some people use intermittent fasting to manage body weight or improve measures such as blood glucose. It may help when it leads to a sustainable reduction in total energy intake. Research has not consistently shown that it is clearly better than other structured eating approaches. Long-term benefits and risks remain uncertain for some fasting patterns.

Religious fasting may involve food, fluids, medicines, or particular times of day. Many faith

communities provide exemptions or alternatives for people whose health could be affected. A clinician can help plan medicine timing, while an appropriate faith leader can explain religious options.

What can go wrong

Fasting can contribute to specific medical problems or practical errors. These are conditions or situations related to fasting, not symptoms of fasting as though it were a disease.

Low blood glucose, or hypoglycaemia, is most likely in people taking insulin or certain other diabetes medicines. Warning signs can include sweating, shaking, hunger, weakness, confusion, or unusual behaviour. The risk depends on the medicine, fasting duration, activity, and recent food intake.

Dehydration can occur when fluids are restricted or fluid losses are increased. Dark urine, a dry mouth, dizziness, or passing much less urine can be warning signs.

Medicine problems can arise when a medicine needs to be taken with food, when a usual dose lowers blood glucose, or when fasting changes the medicine schedule. Do not stop or shift prescription medicines without specific instructions.

Inadequate nutrition is possible with frequent or prolonged fasting, especially if eating periods do not provide enough energy, protein, vitamins, or minerals. Children, adolescents, pregnant or breastfeeding people, frail older adults, and people recovering from illness have particular nutritional needs.

Disordered eating can be worsened by rigid food rules or repeated restriction. Someone with an eating disorder, or a history of one, should discuss elective fasting with an appropriate clinician.

Incorrect test or procedure preparation may delay care or produce a result that cannot be interpreted as intended. If you ate, drank, chewed gum, smoked, or took something outside the instructions, report it honestly rather than guessing whether it mattered.

Seek urgent medical advice if fasting is associated with persistent vomiting, worsening dehydration, repeated low blood glucose, or an inability to take an essential medicine.

Call emergency services for a seizure, loss of consciousness, severe confusion, difficulty breathing, or if a person with suspected low blood glucose cannot safely swallow. Follow an established emergency plan if you have been given one.

What you can do

Before a medically requested fast, confirm:

Ask the ordering clinic about test preparation. For an operation or procedure, use the instructions from the anaesthesia or procedure team because they are tailored to the planned care.

Keep an up-to-date medicine list. Include insulin, non-prescription medicines, vitamins, and herbal products. If you monitor blood glucose, keep a record of readings and any low-glucose episodes.

Before choosing repeated or prolonged fasting, speak with a clinician or registered dietitian if you have diabetes, kidney or liver disease, take medicines affected by food, are pregnant or breastfeeding, are under 18, are frail, or have an eating disorder history.

If your goal is weight management, ask how the plan will meet your nutritional needs and fit your daily life. Record the eating schedule, energy level, medicine changes, and any blood glucose readings that are already part of your care. Ketone testing is not routinely needed simply because you are fasting.

For a healthy adult doing a brief personal fast, there may be nothing medical to check. There is no standard blood test that confirms fasting is safe or beneficial for everyone.

- When the fast starts and ends
- Whether plain water or other clear liquids are allowed
- Whether coffee, tea, gum, smoking, or supplements are restricted
- Which medicines to take, delay, or adjust
- What to do if you eat or drink by mistake

Common questions

Can I drink water before a fasting blood test?

Plain water is often allowed and can make drawing blood easier, but follow the test instructions. A procedure involving anaesthesia may have different fluid rules.

Does black coffee count as fasting?

It may. Coffee can affect some test results and may not qualify as an allowed clear liquid under local instructions. Do not assume that removing milk or sugar makes it acceptable.

Should I take my usual medicine?

Only according to the instructions you were given. Some medicines should continue with a small sip of water; others may need adjustment. Diabetes medicines require particular planning because they can lower blood glucose when you are not eating.

Is a longer fast better before a test or operation?

No. Extra fasting does not necessarily improve accuracy or safety. Use the stated start time rather than extending the fast on your own.

Is intermittent fasting the best way to lose weight?

No single eating pattern is best for everyone. Intermittent fasting may suit some people, but total nutrition, sustainability, health conditions, and medicine safety matter more than the label placed on the schedule.

Sources

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