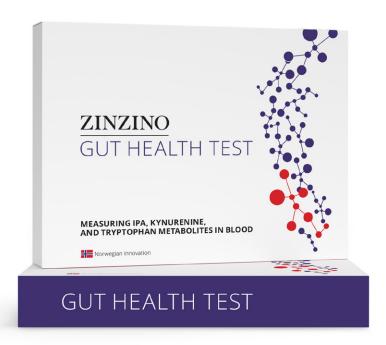
# **GUT HEALTH TEST**

## HOME HEALTH BLOOD SPOT TEST TO TRACK GUT AND METABOLIC ACTIVITY



### **PRODUCT HIGHLIGHTS**

Your gut microbiota influences everything from digestion and immunity to metabolism and mood. The Gut Health Test reveals its functional output — what your gut bacteria are actually producing — and how that activity is affecting you. With just a quick finger prick and a drop of blood, it measures three key tryptophan-derived compounds:

- Indole-3-propionic acid (IPA), a beneficial metabolite produced by gut bacteria.
- Kynurenine (KYN), a metabolite formed in your body during immune activation.
- Tryptophan (TRP), an essential amino acid from your diet.

These results show how tryptophan is being converted — towards beneficial IPA or stress responding kynurenine — and are presented as five clear health markers: your Gut Health Index, IPA level, and three key ratios. Unlike stool-based tests that only identify which bacteria are present, this test goes further — showing how well they are working for you, without the hassle of fecal sampling.

## **KEY BENEFITS**

- Measures functional output revealing how your gut bacteria and body work together to produce healthlinked metabolites.
- Science-backed markers analyzes three key tryptophan-related metabolites linked to gut, immune, and metabolic health.
- ► Advanced analysis uses HPLC-UV-FLD technology for high-precision results.
- ▶ Balance insights shows how a protective metabolite from gut bacteria relates to other insightful markers.
- ► Clear scoring your results distilled into an easy-to-read Gut Health Index.
- ▶ Personalized guidance tailored diet and lifestyle recommendations, with a focus on fiber and polyphenols, based on your unique results.
- ► Simple at-home self-test dried blood spot (DBS) collection, no stool sample required.

## **HOW IT WORKS**

With a quick finger prick, you collect a dried blood spot sample. Our GMP-certified partner laboratory measures three key tryptophan-related metabolites in your blood — Indole-3-propionic acid (IPA), Tryptophan (TRP), and Kynurenine (KYN). From these values, we calculate ratios that reflect the balance between beneficial gut bacterial activity (IPA) and immune pathways in your body.

Your results and personalized recommendations are delivered securely and anonymously via zinzinotest.com.

**For best and most consistent results:** Take the test in the morning after a water-only overnight fast of at least 10 hours and repeat it every **120 days** to track your health journey.

For accurate comparisons over time, take each test under similar conditions — fasted, and not the morning after excessive alcohol intake, illness, or unusually intense exercise.

#### WHAT YOU GET

When your results are ready, you'll receive:

- **5 actionable insights** your Gut Health Index, IPA level, and three key metabolite ratios, each with guidance to improve or maintain them
- Your Gut Health Index an easy-to-understand summary of your gut-microbe-immune metabolite balance.
- Detailed metabolite data precise concentrations of IPA, TRP, and KYN in your blood.
- **Key ratio analysis** clear explanations of key ratios and what they mean for your gut-immune-metabolic balance.
- **Personalized recommendations** science-based guidance on diet and lifestyle (such as fiber and polyphenols) to help improve or maintain your results over time.

## WHAT WE MEASURE

This test focuses on three scientifically important compounds:

- Indole-3-propionic acid (IPA) IPA level a beneficial metabolite produced exclusively by gut bacteria from dietary tryptophan. Higher levels are linked to stronger gut barrier integrity and protection against oxidative stress. IPA is increasingly recognized as a key indicator of gut microbiota function and overall resilience.
- **Tryptophan (TRP)** an essential amino acid obtained from the diet that serves as the precursor (starting material) for both IPA and kynurenine. Tryptophan availability and how it is metabolized can influence gut health, immune function and metabolic balance.
- **Kynurenine (KYN)** a metabolite produced from tryptophan through the kynurenine pathway, often activated by increased immune stress. Higher kynurenine levels and an elevated KYN:TRP ratio are linked to increased immune activation and a shift away from beneficial microbial metabolite production.

We also calculate these key ratios:

- **IPA:TRP ratio Gut microbiome efficiency** reflects the proportion of dietary tryptophan converted by gut bacteria into IPA, influenced by gut microbiota composition and diet.
- KYN:TRP ratio Immune stress indicator an established marker of immune activation and load.

• **IPA:KYN ratio – Microbiome immune support** – a relative balance score showing the relationship between protective and stress-driven pathways in tryptophan metabolism.

Your report also includes a **Gut Health Index**, integrating all measured markers and ratios into a clear, easy-to-understand overview of your of gut-immune-metabolic balance.

#### WHY TRYPTOPHAN METABOLISM MATTERS

Tryptophan metabolism is increasingly recognized as a critical hub connecting gut, immune, brain, and metabolic health. Gut bacteria transform tryptophan into a range of indole metabolites, including IPA – a health-supporting metabolite that supports gut barrier integrity, modulates immune responses, and helps protect against oxidative stress.

Emerging research shows that higher IPA levels are linked to metabolic flexibility, glucose regulation, and immune function. Conversely, when tryptophan metabolism is dysregulated, more of it is diverted into the kynurenine pathway – a route often triggered by your body's stress responses.

This metabolic crossroad between the body and gut bacteria is no longer a scientific curiosity – it is now seen as a cornerstone of intestinal and systemic homeostasis. By decoding your tryptophan metabolism profile, this test reveals the functional output of your gut bacteria and how it relates to immune and metabolic pathways – empowering you to make targeted, evidence-based changes to support long-term health from the inside out.

#### **CERTIFIED & SECURE TESTING**

- Independent laboratory analyzed by Vitas, a GMP-certified lab with 25+ years of experience in high-quality chromatographic analysis.
- **Anonymous results** your sample is linked only to your unique test ID; neither Zinzino nor the lab can identify you.
- **Certified kit** complies with EU regulation 98/79/EB for in vitro diagnostic medical devices and carries the CE mark.



## TAKING YOUR TEST

**1. For optimal accuracy,** perform this test on an empty stomach. Take your test in the morning after an overnight fast of at least 10 hours and complete it before consuming any food.

Only water is permitted during the fasting period. Zinzino Test is an approved in vitro diagnostics product for personal blood sample collection at home.

- First wash your hands with soap and rinse well with warm water and dry them.
- 2. Take out the sample card from the paper envelope.

Save the envelope for later use.

Tear off the SAVE part on the sample card and take a picture of the Test ID. You can ONLY see YOUR test result with your anonymous Test ID. Place the card with the two circles facing up on the table.

- **3. Stimulate blood flow** by making big circles with your arm or shaking the hand downwards for 20 seconds.
- **4.** Take out the single-use lancet. Remove the transparent safety cap and the lancet is ready to use.

Use alcohol wipe to clean the tip of your finger (middle finger is recommended).

Place the lancet against the lower part of the fingertip facing the collection paper on the table. Push the top of the lancet towards the finger until you hear a click. The lancet will automatically make a small prick in the finger.

- **5. Do not touch the filter paper** with your fingers.
- **6.** Fill one circle at a time with blood. Squeeze your finger gently and wait for a drop of blood to fall inside the circle by itself. If one drop of blood does not cover the circle, allow one more drop from your finger to drip immediately.

Leave the sample card in a horizontal position in room temperature for at least 10 minutes for the samples to dry well.

**7.** Insert the **sample card** back into the paper envelope. Then place the paper envelope into the metal bag and **close it**.

**IMPORTANT:** Do not remove desiccant packet inside the metal bag.

**8.** Place the closed metal bag into the big envelope with the laboratory address on it. **NOTE:** You MUST put the correct amount of postage stamps on the envelope before you put it in the mail box.

Go to internet and register your test code on **www.zinzinotest.com**. This is the web page where you can see your test results later. It takes 10–20 days until your result is ready.

**IMPORTANT:** Keep the SAVE part of the card. You can ONLY see YOUR test result on the internet with your anonymous Test ID.



