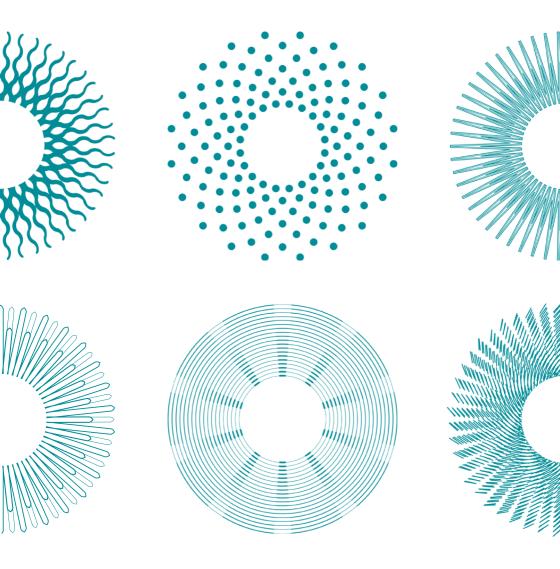
# Product Catalog



iCheck Fluoro Chroma Carotene Iodine Iron Vitamin E



measure for life

### About Bio<mark>Analyt</mark>

Measure nutrients on the spot

Make the right decisions



Get empowering results

Ensure food safety and quality Work with a self-sufficient product "Partnering with BioAnalyt made sense because we needed a rapid and reliable way to test fortified foods to assess coverage and improve the delivery of national fortification programs."

Greg Garrett Large Scale Food Fortification Director, GAIN

"Bioanalyt truly revolutionized quantitative Vitamin A measurement in fortified foods."

Dr. Andreas Bluethner Director Food Fortification & Partnerships BASF

"iCheck is a real breakthrough innovation that brings the lab to the field, making point-of-care nutrient status assessment a reality at last."

Dr. Klaus Kraemer Sight and Life

"iCheck enables us to effectively and efficiently monitor the amount of vitamin A in our vegetable cooking oil products at the processing stage as well as samples from trade."

Moses Adade Quality Assurance Manager, Wilmar Africa Limited











# The product and how it empowers you

**Food producers** can test on the spot the quality of their raw material (e.g. premix) as well as their final end-product.

#### Non-governmental organizations

**(NGOs)** use the test kits to monitor the progress of various food fortification programs.

Monitoring authorities and customs offices use the test kits for 'first line testing' at ports, borders and rural areas where there are no lab facilities.

**Research institutes and labs** use the test kits as high-through put analysis equipment to assess data on nutrients within a short period of time.

# The product and how it works

iCheck is the result of over 30 years of research by our founder,Prof. Dr. F. J. Schweigert. Designed to deliver instant results withhigh precision to be used by anyone.

**Reliable:** State of the art high-quality product for precise results made in Germany.

**Fast:** Results on the spot instead of days with traditional methods; no need for any additional equipment and chemicals, thus no need for complex logistics.

**Simple:** After 1-day training, personnel can operate the device .

#### How it works:

3 simple steps to reliable results in the field:

- 1 Injection of the sample
- 2 Reaction within the ready-to-use test vial.



3 Measurement with the measuring device.



BioAnalyt's measuring devices are designed to provide years of trouble-free operation.

# Service and Support

BioAnalyt is staffed by expert scientists with in-depth knowledge of instrumentation and applications.

Our product specialists can assist you remotely or in your lab.

We offer customized training and support packages to fit your needs.

Our team is happy to respond to your needs:

- On-site and online training
- Feasibility tests for new applications
- Protocol development for your specific application
- Support with design of large-scale sampling and testing
- Support with measuring large sample sets and analyzing data
- Development of new methods

### iCheck Fluoro Vitamin A

iCheck Fluoro is a portable fluorometer for the quantitative determination of the vitamin A content in food and biological fluids within minutes. Using innovative technology, it measures the fluorescence of vitamin A in the sample.

The vitamin A concentration is displayed in µg RE/L (RE=retinol equivalent).

iCheck comes with a case that includes all necessary equipment such as digital balance, batteries, battery charger, standard, USB cable etc.



TECHNICAL DATA	
Analyte:	Vitamin A (retinol)
Sample type:	Vitamin premixes, sugar, flour, milk and breast milk
Sample preparation:	None for liquid samples; Homogenization and Dilution in water for solids
Analysis method:	Fluorometric
Principle of method:	Autofluorescence of vitamin A
Sample volume per analysis:	500 µL (0.5 mL)
Linear range:	50–3000 µg retinol equivalents (RE)/L
Time per analysis:	< 10 minutes
Optimal measuring temperature:	20-30 °C
Accuracy:	Request our Performance Guide
Method comparison:	Validated against HPLC
Light source:	LED lamp
Staff qualification:	1 day training
Use:	portable
Data transfer:	included, via USB cable
Weight:	0.45 kg
Dimensions:	11 x 4 x 20 cm (W x H x L)

### iCheck Chroma 3 Vitamin A in Oil

#### TECHNICAL DATA

Analyte:	Vitamin A (retinol)
Sample type:	Refined edible oils: soybean, palm, sunflower, cottonseed, corn, peanut, rapeseed, coconut
Sample preparation:	Not required
Analysis method:	Photometric
Principle of method:	Absorption
Sample volume per analysis:	100 µL (0.1 mL)
Linear range:	3–30 mg retinol equivalents (RE)/ kg
Time per analysis:	< 2 min
Optimal measuring temperature:	20 – 30°C
Accuracy:	Request our Performance Guide
Light source:	LED lamp
Staff qualification:	1 day training
Use:	portable
Data transfer:	included, via USB cable
Weight:	0.45 kg
Dimensions:	11 x 4 x 20 cm (W x H x L)

iCheck Chroma 3 is a portable photometer for the quantitative determination of the vitamin A content in a wide range of vegetable oils within minutes.

Using innovative technology, iCheck Chroma 3 works with a specific measurement procedure and calculates the vitamin A content through a sophisticated algorithm.

iCheck comes with a case that includes all necessary equipment such as batteries, standard, battery charger, USB cable, etc.



# iCheck Carotene

iCheck Carotene is a portable photometer for determining total carotenoids concentration in food and biological fluids such as breast milk and cattle blood.

iCheck Carotene measures the color in the test vial and calculates the total carotenoid content in mg/L.

Our customers use the test kit to measure total carotenoids in cassava to select pro-vitamin A rich varieties.

Reagents are sold separately in Test Kits. One Test Kit box contains vials and other consumables sufficient for 100 analyses.

Additional **Sample Preparation** kits are provided for measurement in **Salmon** and **Egg**.



TECHNICAL DATA	
Analyte:	Total carotenoids
Sample type:	Vitamin premixes, beverages, food and biological fluids
Sample preparation:	None for liquid samples; Dilution in water for solid samples
Analysis method:	Absorption
Principle of method:	Photometric
Sample volume per analysis:	400 µL (0.4 mL)
Linear range:	0.15–15.0 mg/L
Time per analysis:	< 10 min
Optimal measuring temperature:	20-30°C
Accuracy:	>90%
Method comparison:	Validated against HPLC
Light source:	LED lamp
Staff qualification:	1 day training
Use:	portable
Data transfer:	included, via USB cable
Weight:	0.45 kg
Dimensions:	11 x 4 x 20 cm (W x H x L)

# iCheck <mark>lodine</mark>

#### TECHNICAL DATA

Analyte:	lodine (only in the form of potassium iodate)
Sample type:	Salt
Sample preparation:	Dilution of salt in water
Analysis method:	Photometric
Principle of method:	Absorption
Sample volume per analysis:	1000 μL (1.0 mL)
Linear range:	1.0–13.0 mg/L
Time per analysis:	< 10 minutes
Optimal measuring temperature:	20-30°C
Accuracy:	Request our Performance Guide
Method comparison:	Validated against iodometric titration
Light source:	LED lamp
Staff qualification:	1 day training
Use:	portable
Data transfer:	included, via USB cable
Weight:	0.45 kg
Dimensions:	11 x 4 x 20 cm (W x H x L)

iCheck lodine is a portable photometer that determines iodine quantitatively in salt.

iCheck lodine measures the potassium iodate-specific color reaction in the test vial and calculates the iodine content in mg/L.



# iCheck <mark>Iron</mark>

iCheck Iron is a portable photometer that determines iron quantitatively in food.

iCheck Iron measures the iron specific color reaction in the test vial and calculates the iron content in mg/L.



TECHNICAL DATA	
Analyte:	Ferrous and ferric iron
Sample type:	Vitamin premixes, flour, soy- and fish-sauce, beverages
Sample preparation:	None for liquid samples; Homogenization and dilution in water for solids
Analysis method:	Photometric
Principle of method:	Absorption
Sample volume per analysis:	400 µL (0.4 mL)
Linear range:	1.5–12.0 mg/L
Time per analysis:	10-60 min
Optimal measuring temperature:	20-30 °C
Accuracy:	Request our Performance Guide
Method comparison:	Validated against Atomic Absorption Spectroscopy (AAS)
Light source:	LED lamp
Staff qualification:	1 day training
Use:	portable
Data transfer:	included, via USB cable
Weight:	0.45 kg
Dimensions:	11 x 4 x 20 cm (W x H x L)

# iCheck <mark>Vitamin E</mark>

TECHNICAL DATA	
Analyte:	Alpha tocopherol
Sample type:	Cattle serum and whole blood
Sample preparation:	None
Analysis method:	Fluorometric
Principle of method:	Autofluorescence of vitamin E
Sample volume per analysis:	500 μL (0.5 mL)
Linear range:	1.0-25.0 mg/L
Time per analysis:	< 10 min
Optimal measuring temperature:	20-30 °C
Accuracy:	>90%
Light source:	LED lamp
Staff qualification:	1 day training
Use:	portable
Data transfer:	included, via USB cable
Weight:	0.45 kg

iCheck Vitamin E is a portable fluorometer for the quantitative determination of the vitamin E content in biological fluids within minutes.

The vitamin E concentration is displayed in mg/L.

It is used to measure vitamin E in cattle serum and whole blood.



## Technical <mark>Data</mark>

iCheck devices are equipped with the latest visible light emitting diode (LED) technology. Using LEDs as a light source eliminates all known problems with halogen lamps used by other readers. Modern LEDs emit particularly stable light and have very low energy consumption.

iCheck is calibrated at the production site in Germany with reference standards according to quality management system. This eliminates the need for the user to calibrate the device.

The 2-in-1 disposable reagent vial and measuring cuvette contains a patented combination of reagents developed to efficiently measure the analyte in the sample. One reagent vial package contains 100 reagent vials, each with a certified volume of reagents. If additional chemicals or equipment are required, BioAnalyt provides these.

BioAnalyt's products and services meet all quality standards, such as the DIN EN ISO 900:2015. BioAnalyt is successfully audited by TÜV Nord in Germany and is regarded as a fully approved hardware and software supplier.

Reagent vials have a shelf life of 12 months when stored at room temperature and upright. Each iCheck device comes with a 2-year warranty.

## Contact us

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Made in Germany









