



CTX Quick Check App



Breakfast Drinks

A breakfast drink can be satisfying, comforting, energizing, healthy or all four. In our fast paced world, many people grab a ready-made drink in the morning. Just because it's convenient, doesn't mean it isn't nourishing. A "healthy" breakfast drink depends on which nutrients are most important to the individual.

Consumers stay informed with a quick check of the label. For a testing lab, X-ray Fluorescence (XRF) analysis provides a simple, quick, and non-destructive check to confirm nutrient mineral content in beverages and other food products, for breakfast or for anytime.

Portable XRF to Screen for Nutrients

The benefits of minerals are as varied as the nutrients themselves. Any breakfast drink, from coffee to tea to cocoa to an energy drink, can be formulated with a selection of minerals to help build strong bones, transmit nerve impulses, or maintain heart health. Even a coffee contains potassium, magnesium and manganese which are some of the same minerals found in a banana, another breakfast staple. Portable XRF is used to quickly and non-destructively screen beverages and food for minerals.

Mineral	Benefit*
Mg	Found in bones; needed for making protein, muscle contraction, nerve transmission, immune system health
P	Important for healthy bones and teeth; found in every cell; part of the system that maintains acid-base balance
K	Needed for proper fluid balance, nerve transmission, and muscle contraction
Ca	Important for healthy bones and teeth; helps muscles relax and contract; important in nerve functioning, blood clotting, blood pressure regulation, immune system health
Mn	Part of many enzymes
Fe	Part of a molecule (hemoglobin) found in red blood cells that carries oxygen in the body; needed for energy metabolism

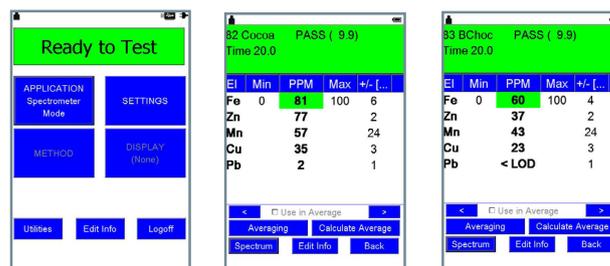
*: Source of mineral benefits from Univ of Michigan Medicine Health Library

The high performance and contrast daylight visible LCD 3.7 inch touchscreen display is for system control and view of easy-to-read, and understandable results. These can be viewed as spectra, concentration or as pass/fail with preset thresholds.

Bruker's Portable CTX™



- Small, lightweight battery operated portable XRF analyzer
- 7.1 kg (15.6 lbs) with battery
- 13.5 cm x 25 cm x 35 cm WxDxH (5.3 in x 9.8 in x 13.8 in)
- Operating temperature: -10° C to +40° C (+14° F to 104° F)
- Splash / dust proof (IP-54) stainless steel housing for use in rugged conditions
- Sample chamber: 12 cm x 13.5 cm x 8.5 cm WxDxH (4.7 in x 5.3 in x 3.3 in)



Bruker's Portable CTX Quick Check PLUS

Do you need to do a Quick Check to screen for the presence of toxic elements too? The CTX can be customized to meet your specific needs.

- Ready-to-go factory standard or custom calibrations
- Optional EasyCal Software to create your own calibrations
- Measure powders, liquids, solids or pastes
- Capable of measuring elements from Mg to U in ambient air
- Print results with optional Bluetooth™ portable printer

Bruker Portable XRF Elemental Analyzers: Simultaneously measure elements from sodium (Na) to uranium (U) at concentrations as low as parts-per-million to high percentage levels (depending on the element). Objects of any form – liquid, solid, cores, powder, shavings, chips – can be analyzed wherever they are located.

Bruker's portable Counter Top XRF, the CTX™, is for qualitative and semi-quantitative elemental analysis. It also performs quantitative analysis when utilizing calibrations with like-sample standard reference materials. Results can be given as spectra, composition, or Pass/Fail/Inconclusive for single or multi-elemental analysis of elements from Mg to U. The convenient form factor of the CTX is ideal for samples presented in containers such as powders, soils and liquids; small samples; and those which require extended measurements of more than a few seconds.



CTX™ Portable XRF analyzer
Mg (12) to U (92)

Bruker's portable XRF features

- Rh X-ray tube with high performance SDD detector
- 5 filter wheel (plus manual slot for TRACER 5)
- SharpBeam geometry for high performance, speed and sensitivity
- Touchscreen operation
- Internal camera (optional for CTX and TITAN)
- Wireless communication
- Battery or AC operation
- Lightweight and supplied with water tight transport case

Bruker's two handheld XRF spectrometers, the TRACER 5™ and the S1 TITAN™, are for qualitative and semi-quantitative elemental analysis. They also perform quantitative analysis when utilizing calibrations with like-sample standard reference materials. Results can be given as spectra, composition, or Pass/Fail/Inconclusive for single or multi-elemental analysis of elements from Na to U. A desk or bench top stand with a PC can be used for samples presented in containers such as powders, soils and liquids; small samples; and those which require extended measurements of more than a few seconds.



S1 TITAN Handheld XRF analyzer
Mg (12) to U (92)



TRACER 5 Handheld XRF analyzer
Na (11) to U (92)

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