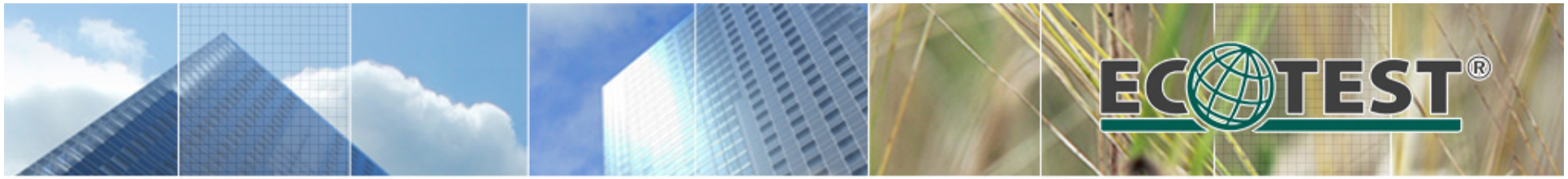
ECOTEST®
Radiation Measurement Instruments

FoodTester-G

Analyzer of cesium isotopes activity in food

FoodTester-G ADVANTAGES

- mobile, practical
- no special training of the user is required,
  operates in the interactive mode
- no certain container for a food product is required,
  designed to take measurements by being put to the food product
- no special preparation of a food product is required
  (the food stays inside the container/packing)
- no special protection is required

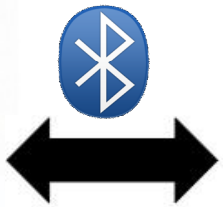


FoodTester-G PURPOSE OF USE

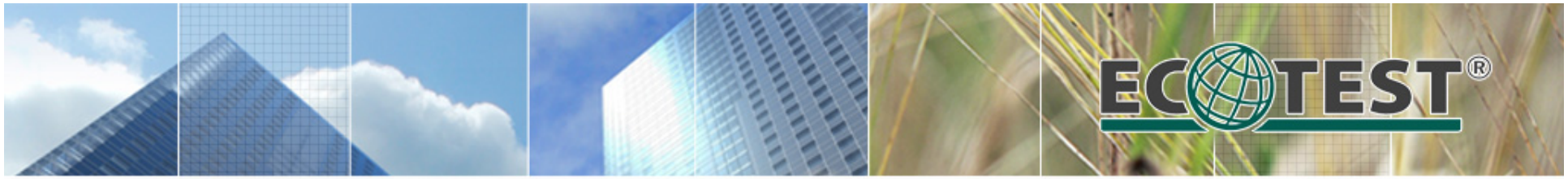
- measurement of gamma radiation ambient dose equivalent rate (DER)
- detection of cesium isotopes activity in food products and calculation of their specific activity

FoodTester-G DELIVERY KIT

- detecting unit based on the scintillation detector of gamma radiation (Csj – scintillator-photodiode)
- tablet PC with installed Android OS and specialized software



Data communication is done via the Bluetooth channel



FoodTester-G TECHNICAL SPECIFICATIONS

- Measurement range of gamma radiation DER – from 0.1 μSv/h to 100 μSv/h.
- Energy range of registered gamma radiation – from 0.05 MeV to 3.0 MeV.
- Error of gamma radiation DER measurements - 15 %.
- Minimum detected cesium isotopes activity in food products at up to 0.15 μSv/h background level is 50 Bq/kg (at up to 0.05 μSv/h background level – 10 Bq/kg).
- Time of continuous operation:
  - detector – 40 hours,
  - tablet PC – 8 hours.
- Ingress protecting rate of the detector IP54.
- Operating temperature range:
  - detector – from -20 ºC to +40 ºC,
  - tablet PC – specifications specified by the manufacturer.
- Weight and dimensions:
  - detector (without case) – not more than 0.4 kg and 110×36×83 mm respectively,
  - tablet PC – determined by its type (default weight and dimensions do not exceed 0.15 kg and 135x65x10 mm).

TWO OPERATING MODES

- mode of gamma radiation DER measurement (priority mode)
- FoodTest mode

MODE of gamma radiation DER measurement

FoodTest MODE

- detection of cesium isotopes activity in food products
- calculation of existing cesium isotopes specific activity in food products

Food product groups that can be tested

- baby nutrition

- water, milk

- meat, fish, eggs

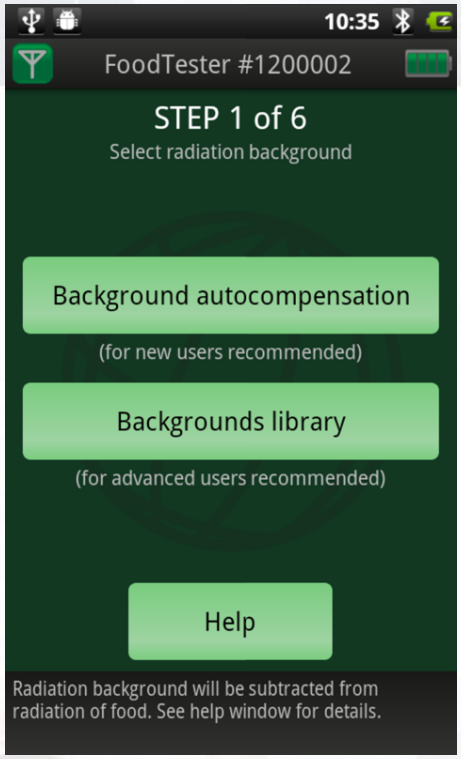
- vegetables, fruits

- grain, corn

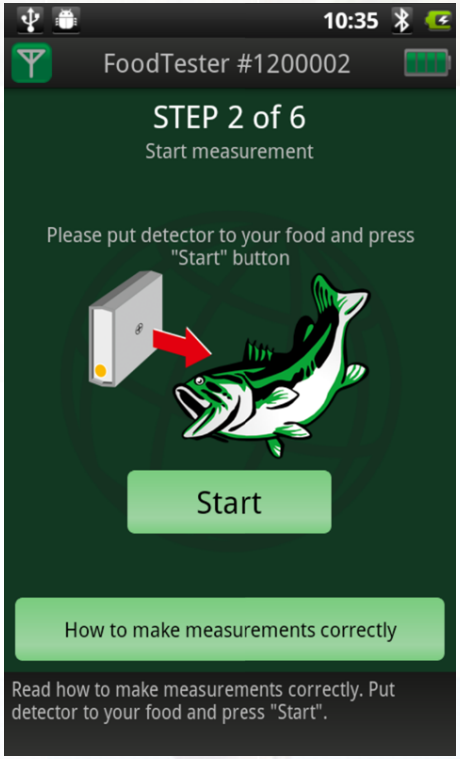
- dried food

- dried herbs (tea)

FoodTest MODE – 6 steps

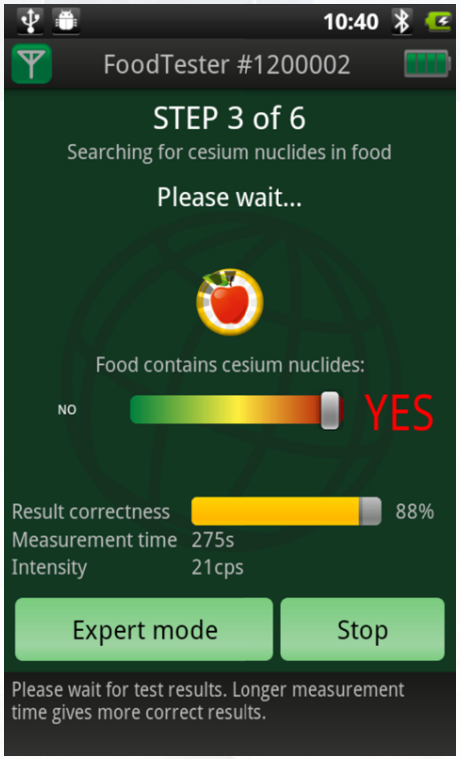


Step 1. Celecting the way of compensation of background

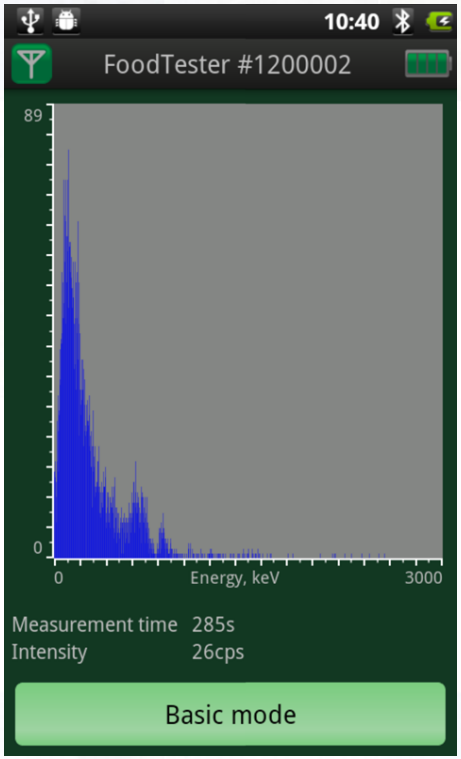


Step 2. Putting the device to a food product

FoodTest MODE – 6 steps (continued)

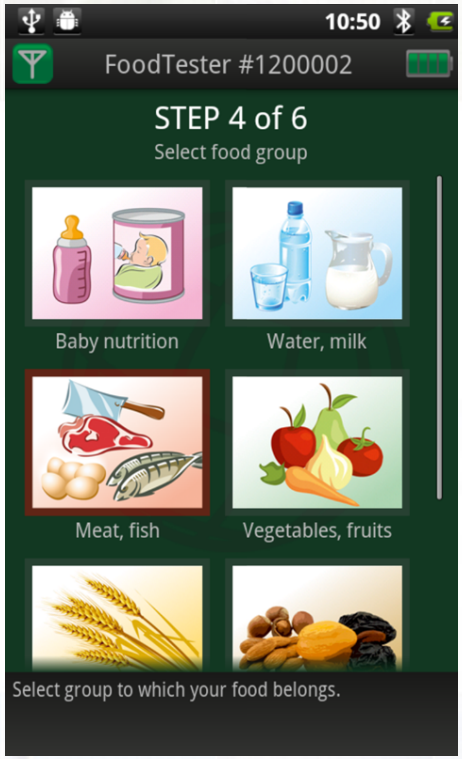


Basic mode



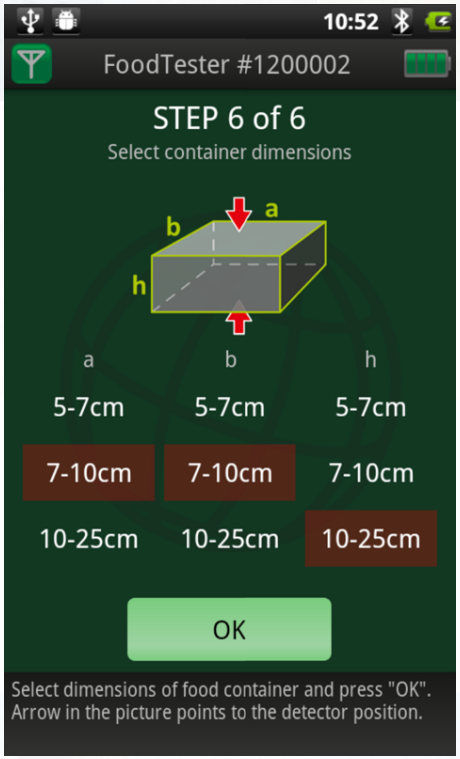
Expert mode

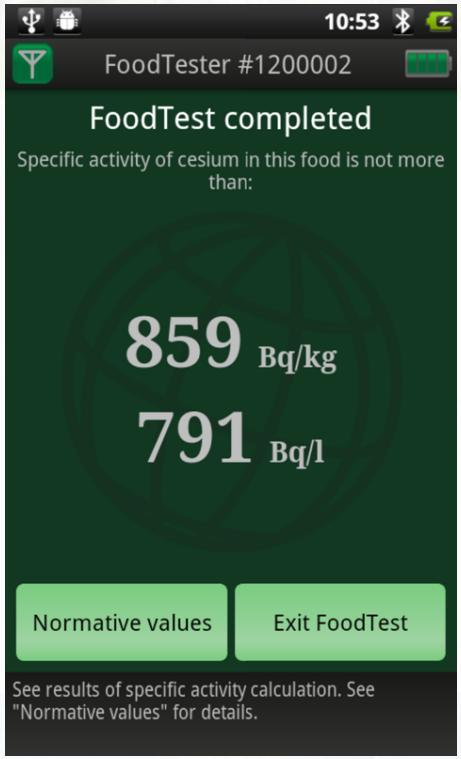
Step 3. Searching for cesium isotopes



Step 4. Selecting a food group

FoodTest MODE – 6 steps (completion)





Step 5. Selecting a form of the food product (container/packing)

Step 6. Selecting a dimensions of the food product (container/packing)

Calculation results of cesium isotopes specific activity

FoodTester
Your Radiation Safety

Thank you for your attention !

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