

# Instructions

## Egg Preparation Kit



Prepare your egg sample for the measurement on your iCheck™ **Carotene** using the **Egg Preparation Kit**.

To prepare the egg sample follow these steps:

### 1 Prepare the Dilution Buffer

- Take one of the six Dilution Buffer flasks. Fill the flask to the 40 mL mark with bottled or distilled water. Mix the solution until the powder is completely dissolved.
- Note: Solubilized Dilution Buffer must be stored at room temperature. One flask is sufficient for approx. 20 measurements.

### 2 Weigh in the egg sample

- Turn on the balance supplied with your iCheck Carotene, place a clean Test Tube in the plastic stand, and place both on the balance. Now press Z/T. This will zero the weight of the Test Tube and the stand. The display will show "0.0 g".
- Keep the Test Tube on the balance and weigh egg sample into the test tube. When measuring raw egg sample use the small plastic pipettes provided with the kit.
- Use the table below as a guide for how much sample to weigh in:

| Grams of egg | Expected concentration of total carotenoids in the egg |
|--------------|--|
| 0.1          | 120 – 240 mg/kg  |
| 0.2          | 60 – 120 mg/kg   |
| 0.4          | 10 – 60 mg/kg  |
| 0.8          | <10 mg/kg  |

### 3 Mix the sample with the Dilution Buffer

- Using a big plastic pipette, supplied in the kit, add the solubilized Dilution Buffer to the egg sample to a final weight of 2.0 g.
- Shake the Test Tube vigorously for approx. 10 seconds. Now the egg sample is ready for measurement.

### 4 Inject and measure the egg sample

- Inject and measure the egg suspension following the instructions in the iCheck Carotene User Manual.

### 5 Calculate the final concentration

- Calculate the dilution factor of the egg suspension by dividing the weight of the suspension with the weight of the egg:  
Example:  $2.0 \text{ g} / 0.2 \text{ g} = 10$ .
- Multiply the result displayed by the iCheck Carotene with the dilution factor:  
Example:  $7.5 \text{ mg/L} \times 10 = 75 \text{ mg/L}$ .
- If you have questions contact BioAnalyt Support at [support@bioanalyt.com](mailto:support@bioanalyt.com).

**Notes:** Homogenizer can be provided upon request by BioAnalyt.

