

## Test Compounds

### Simple, Safe Dosing

Research Diets, Inc. will incorporate your compounds into any experimental diet. Feeding test compounds eliminates dosing related stress to the animal, eliminates vehicle effects, and saves time and labor. Consult with one of our scientists on the formula, determine the dosage required and the diet will be produced and shipped in 5 to 7 business days.

### Repeat Formula and Dose Response

Consistent OpenSource Diet® formulation provides a clean, repeatable control diet for your research. Precise, graded addition of test compounds to your specified control diet allows evaluation of dose response effects in your animal model. We can blend your compound homogeneously into any diet, typically to ppm and even as low as parts per billion.

### Pelleted Micro Batches

Research Diets will incorporate test compounds into pelleted micro batches as small as 200 grams for those compounds that are in limited supply. Our production facility is well equipped to pellet small batches at precise doses.

**Examples of Compounds Added**

- Chemotherapeutics
- COX-2 Inhibitors
- Antioxidants
- Nutraceuticals
- Statins
- Insulin sensitizers
- NSAIDS

**A Dose Response Study**



▶ We start by thoroughly mixing the compound in a small bowl with a pre-mix and dye.



▶ Then we transfer the contents of the small bowl into a larger bowl.



▶ The dye assures that the compound is homogeneously mixed and ready for pelleting.

### How to Calculate the Diet Dose of your Compound

#### STEP 1: VARIABLES NEEDED

Variables		Units
Single Daily Dose	SD = <input type="text"/>	mg Cmpd/kg BW/day
Body Weight	BW = <input type="text"/>	gm BW/animal
Daily Food Intake	FI = <input type="text"/>	gm Diet/day
Diet Dose	DD= <input type="text"/>	mg Cmpd/kg Diet

#### STEP 2: PLUG FIGURES INTO FORMULA

**Formula:  $DD = (SD \times BW) / FI$**



## Pica Behavior

Visceral illness is an undesirable side effect of some pharmaceutical treatments and experimental paradigms, and confounds the study of appetite regulation. By definition, visceral illness describes a range of nausea and concomitant anorexia caused by many factors, including ingestion of toxins, infections, presence of cancer, etc. Consumption of non-nutritive substances (pica behavior) such as kaolin, has been documented to reflect feelings of visceral illness in rats and mice.



**Kaolin Pellets**

### Kaolin Use in Research

- Pre-clinical Drug Discovery
- Obesity and diabetes
- Oncology
- Radiation Therapy
- Chemotherapeutics
- Nausea research
- Anti-emetics
- Cachexia

## Cost Effective Indicator

Research Diets, Inc. offers a non-nutritive kaolin pellet for use in your research. It is a cost effective, easy to use, early indicator of visceral illness in your experimental animals. Early identification of this adverse experience profile of a compound saves money and streamlines the rational drug design process. Researchers studying metabolic disorders rely on food intake measures as a primary endpoint in evaluating the efficacy of experimental treatments. However, anorectic effects can reflect primary efficacy or secondary effects due to visceral illness. Consumption of kaolin offers early insight into the mechanisms operating in your in vivo studies.



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