MAY 09, 2019

OPEN ACCESS

DOI:
dx.doi.org/10.17504/protocols.io.xmtfk6n

External link:
<https://mmpc.org/shared/document.aspx?id=197&docType=Protocol>

Protocol Citation: Patrick Tso, Dana Lee 2019. U Cinn - Non-invasive Measurement of Intestinal Fat Absorption.
protocols.io
<https://dx.doi.org/10.17504/protocols.io.xmtfk6n>

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working
 We use this protocol and it's working

Created: Jan 31, 2019

Last Modified: May 09, 2019

PROTOCOL integer ID:
 19859

U Cinn - Non-invasive Measurement of Intestinal Fat Absorption

Patrick Tso¹, Dana Lee¹

¹University of Cincinnati

Mouse Metabolic Phenotyping Centers

Tech. support email: info@mmpc.org

Lili Liang

ABSTRACT

Summary:

Dietary fat containing 5% sucrose polybehenate, a non-absorbable food additive, is fed in a semi-synthetic diet containing absorbable fat to rodents. The animals eat the diet ad lib for 3 days. Two or more fecal pellets are collected on days 3 and 4. Fat absorption is calculated from the ratios of behenic acid to other fatty acids in the diet and in the feces as analyzed by gas chromatography of fatty acid methyl esters.

MATERIALS

MATERIALS

Rodent Diet With 45 kcal% Fat and Modification To 16% Fat (Mostly Safflower Oil Butter Fat) With 5% Fat as Sucrose Polybehenate **Research Lab Diets Catalog #D07031501-02**

Keywords: Dietary fat, 5% sucrose polybehenate, a non-absorbable food additive, fat absorption

1 Animal Feeding and Fecal Collection:

MONDAY: REPLACE CHOW WITH TEST DIET

TUESDAY: CONTINUE TEST DIET,
NEW CAGE BEDDING BEFORE FEEDING PERIOD

WEDNESDAY: CONTINUE TEST DIET
(DAY 3 – RETURN)
COLLECT 5-8 FECAL PELLETS/ANIMAL
CHANGE CAGE BEDDING BEFORE FEEDING PERIOD

THURSDAY: COLLECT 5-8 FECAL PELLETS/ANIMAL
(DAY 4 – RETURN)