**Department of Kinesiology**

**Parental permission for Adolescent males to Participate in Research involving DXA Testing**

**Introduction**

The purpose of this *form* is to provide you (the parent or legal guardian of a prospective research study participant) information that may affect your decision to allow your child to participate in this research study. If you allow your child to enroll in this research study, this form will be used as a record of your permission.

**Purpose of the Study**

The purpose of this research is to evaluate the body composition of the participant.

**Background on DXA**

DXA (or DEXA) stands for dual energy X-ray absorptiometry. It is a method by which two intensities of X-rays are scanned across the body. The resulting image is analyzed to provide estimates of body composition. This includes total body fat, lean tissue, and bone.

**Benefits**

The advantages of DXA over other body composition assessments are that the results are more accurate and highly reproducible.

This is not intended to provide a medical or therapeutic diagnosis or treatment.

**Risks**

The DXA scanner emits a small amount of radiation. Using the standard way of describing radiation exposure, from one DXA scan you will receive an effective does of **less than one thousandth of one rem (i.e. less than 1 mrem).** By comparison, the average person in the United States receives this much radiation every day from natural background sources, such as the sun and from radioactive materials that are found naturally in the earth’s air and soil. The Food and Drug Administration (Title 21 CFR Part 361) and the National Institutes of Health (NIH) Radiation Safety Committee guidelines for radiation exposure allow for research subjects to be subjected to 5000 mrem per year. If your child had high dose X-ray testing or radiation treatment in the last year that may cause him to exceed this guideline, please inform the DXA operator. The table below can be used to calculate the annual radiation exposure from common medical procedures.

|  |  |  |  |
| --- | --- | --- | --- |
| **Doses from Medical Procedures (x-ray, single exposure)** | | | |
| **Procedure** | **Dose (mrem)** | **Procedure** | **Dose (mrem)** |
| Chest | 10 | Mammogram (2 views) | 72 |
| Dental | 1.5 | CT-Full Body | 1000 |
| Hand/Foot | 0.5 | CT-Chest | 700 |
| Abdomen | 60 | CT-Head | 200 |
| Pelvis | 70 | Nuclear Medicine (injected radionuclides) | 400 |

Source: U.S. Nuclear Regulatory Commission: <https://www.nrc.gov/about-nrc/radiation/around-us/doses-daily-lives.html>

I certify that the combined radiation exposure to my child from medical devices/treatments did not exceed 5000 mrem over the last year

\_\_\_\_\_\_\_\_\_\_ (please initial)

**Questions**

The Department of Kinesiology has a special committee set up to oversee the operations of the DXA protocol and facility. If you have any questions concerning your test or the DXA facility, you can contact the Kinesiology Department Chair at 410-704-2772.

**Signature**

You are deciding to allow your child to receive a DXA scan. Your signature below indicates that you have read the information provided above and have decided to allow your child to undergo DXA testing.

**Printed name of child:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Signature of Parent or Legal Guardian**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Date:**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Signature of Investigator:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_