3. The *effective dose* is proportional to the ***weighting factors*** for different organs, and the *dose equivalent*. The effective dose is also proportional to the *dose*, thus the X-Ray *exposure*. So based on the table below, given the same *exposure*, greater ***weighting factors*** for organs in the abdomen

A picture containing table

Description automatically generated

2. The intensifying screen exists to improve the absorption efficiency compared to having only the film, where only 2% of incoming Xray will contribute to the output image. However, X-ray photons going through the intensifier will be scattered in all directions. Thus the **thicker** the intensifier, the smoother the light spot we receive on the film, and consequently **more** image **blurring**.

I'm currently working on developing accurate measurements of the muscle diffusion tensor through the application of physical phantoms and computer simulation.