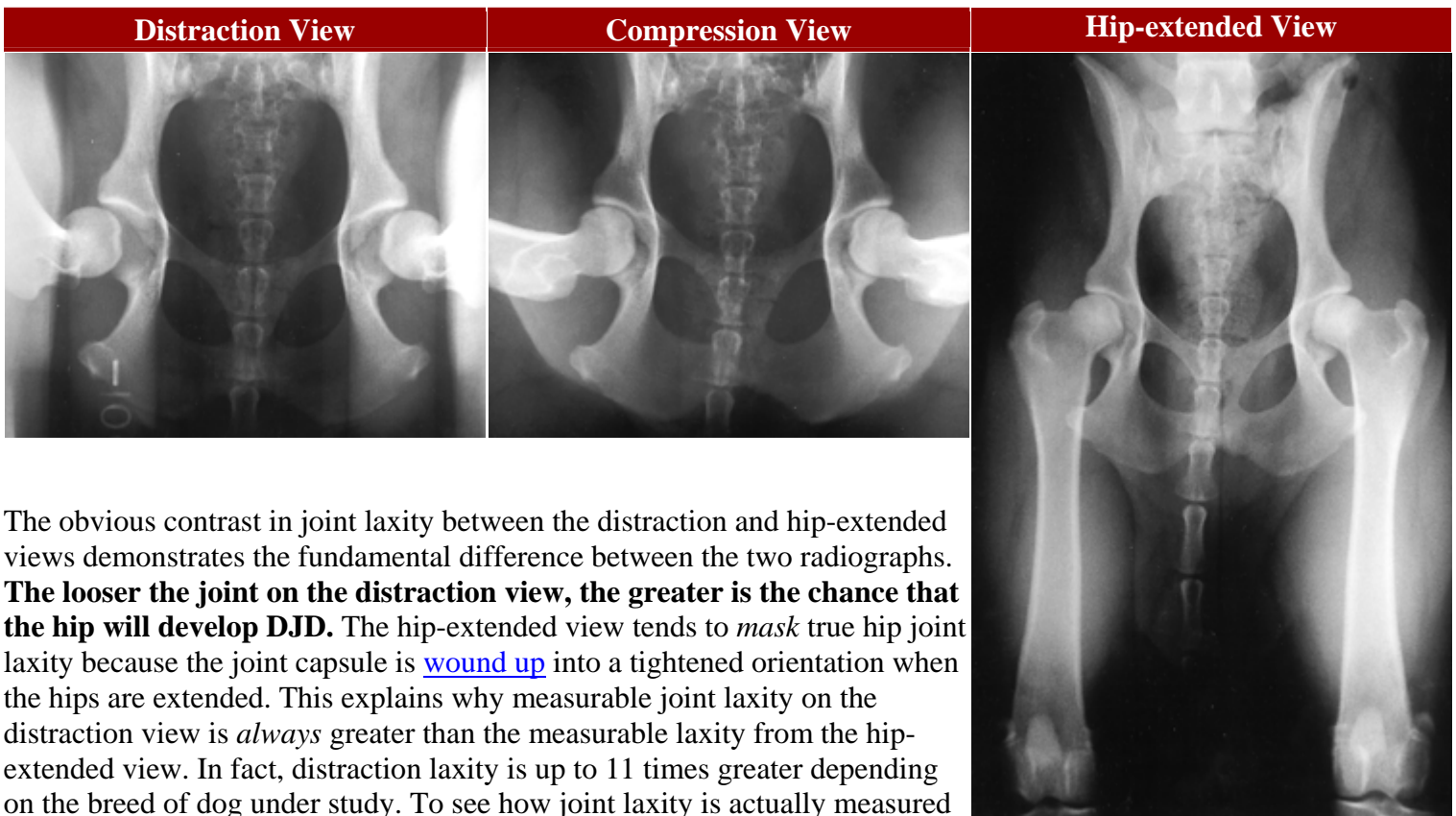


# Introduction to the PennHIP Method

The PennHIP method is a novel way to assess, measure and interpret hip joint laxity. It consists of three separate radiographs: the distraction view, the compression view and the hip-extended view (see below). The distraction view and compression view, developed by Dr. Smith, are used to obtain accurate and precise measurements of joint laxity and congruity. The hip-extended view is used to obtain supplementary information regarding the existence of degenerative joint disease (DJD) of the hip joint. (The hip-extended view is the conventional radiographic view used to evaluate the integrity of the canine hip joint.) The PennHIP technique is more accurate than the current standard and it has been shown to be a better predictor for the onset of DJD.

The radiographs below are of the **same dog**, yet the hip joint laxities in each view look very different. Notice that the hips in the distraction view appear to be much looser than they do in the hip-extended view.



The obvious contrast in joint laxity between the distraction and hip-extended views demonstrates the fundamental difference between the two radiographs. **The looser the joint on the distraction view, the greater is the chance that the hip will develop DJD.** The hip-extended view tends to *mask* true hip joint laxity because the joint capsule is wound up into a tightened orientation when the hips are extended. This explains why measurable joint laxity on the distraction view is *always* greater than the measurable laxity from the hip-extended view. In fact, distraction laxity is up to 11 times greater depending on the breed of dog under study. To see how joint laxity is actually measured and interpreted, go to the [PennHIP Research](#) section.

The compression view is used to determine the "goodness of fit" of the femoral heads into the acetabula. In a hip with DJD, the remodeling that occurs in the acetabulum

and/or the femoral head, will often result in an ill-fitting "ball" and "socket" (see [Canine Hip Dysplasia](#) for an example of DJD).

To summarize, the PennHIP method

- Obtains DJD readings from the standard hip-extended view
- Obtains hip joint congruity readings from the compression view
- Obtains quantitative measurements of hip joint laxity from the distraction view

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**It was announced that the Australian Veterinary Association (AVA) will adopt the PennHIP screening method and use it in conjunction with their current hip screening system for a period of 5 years; at the end of that time, both methods will be reevaluated for their efficacy in reducing canine hip dysplasia.**