## **Knee Braces to Prevent Ligament Injuries:**

The studies reviewed above provide conflicting results on the protective effect of knee bracing to reduce ligament injuries. Some smaller studies and studies involving only one team have found braces protective while other single school studies found no protective effect or a non-significant increase in injuries. Two nationwide studies of collegiate athletes found no evidence that braces offered protection from knee injuries. Five hundred and eighty high-school football players were studied over a period of two seasons to determine the effect of so-called prophylactic knee braces on the lower extremity. While there were more injuries of the knee in the participants who were double-hinged braces than in the matched controls, who did not wear braces. There was also a dramatic increase in the number of injuries of the ankle and foot in the athletes who wore braces.

The American Academy of Orthopaedic Surgeons and the American Academy of Pediatrics have concluded that prophylactic knee braces lack sufficient evidence of efficacy in reducing the incidence or severity of ligamentous knee injuries. A prophylactic knee brace may offer a subjective sense of protection, but it is unable to protect an MCL during a direct lateral impact. Overall, lower extremity muscle strengthening, flexibility improvements and technique refinement are more important than functional bracing in treating ligamentous knee injuries

## **Knee Braces for Kneecap Pain:**

Patellofemoral braces are an inexpensive, subjectively helpful component of anterior knee pain therapy. Their mechanism of action remains unclear, but most appear to improve patellar tracking through a medially directed force. <sup>25</sup> Changes in regional temperature, neurosensory feedback or circulation may also contribute to their effects. <sup>23</sup> Overall, patellofemoral braces should be used in conjunction with a comprehensive knee rehabilitation program that includes strengthening, flexibility and technique improvements.