**Body Type and Performance: How Size Shapes Linemen Matchups**

**Introduction**  
In passing plays, success often hinges not just on the quarterback and receivers but on the linemen battles at the line of scrimmage. Offensive linemen (OL) protect the quarterback by holding their ground, while defensive linemen (DL) disrupt timing through pressure. This study explores how body type — height, weight, and size archetypes — influences performance, using the NFL Big Data Bowl 2023 dataset.

**Methodology**  
We combined player physical data (height, weight, BMI) with PFF scouting outcomes (pass-block and pass-rush snaps, pressures allowed/created). We focused on plays where linemen were directly engaged in pass protection or rushing. Players with at least 10 relevant snaps were included to ensure stable comparisons.

**Findings**

***Graph 1: Weight Distribution (OL vs DL)***

A diagram of a weight distribution

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Figure 1 Weight distribution

Boxplot in Figure 1 are comparisons that confirm that OL are generally 40–50 lbs heavier than DL. This mass advantage helps OL anchor the pocket, while DL rely more on quickness. Offensive linemen (OL) are heavier on average than defensive linemen (DL), reflecting a bulkier build that helps them anchor the line in pass protection.

***Graph 2: Body Type Archetypes by Position***

*A chart of different colored dots

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Figure 2 Body type distribution by position

The Figure 2 are Scatterplots of height vs. weight reveal clear clusters by position. Tackles are taller with long reach, guards and centres are shorter but dense, defensive tackles (DT/NT) form the heaviest group, and edge defenders (DE/OLB) are lighter and quicker.  
Offensive and defensive linemen fall into distinct body-type clusters. OL positions tend to be bulkier (heavier and often taller), whereas DL (and edge rushers) are generally lighter and leaner, relying more on speed.

***Graph 3: OL Weight vs Pressure Allowed***

A graph of blue dots

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Figure 3 OL weight vs pressure allowed

Figure 2 is a scatter of OL performance shows heavier linemen tend to allow fewer pressures. While not absolute, the trend suggests mass helps extend protection time, supporting quarterbacks in delivering cleaner throws. Heavier offensive linemen tend to have lower pressure allowed rates. This suggests their extra mass helps sustain blocks and keep the quarterback protected longer.

***Graph 4: DL Weight vs Pressure Created***

A diagram of a weight loss graph

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Figure 4 DL weight vs pressure created

Figure 4 shows that on the defensive side, lighter DL achieved higher pressure rates, while heavier interior defenders focused on collapsing the pocket. This highlights the balance of speed rushers on the edge and power players inside. Lighter defensive linemen generate pressure at higher rates, highlighting how a leaner, speed-oriented build is more effective at rushing the passer.

**Conclusion**  
Body type clearly influences linemen performance. Offensive linemen benefit from bulk, while defensive linemen thrive with speed and agility. The contrasts in archetypes — heavy, stabilizing OL vs. lighter, disruptive DL — illustrate the balance of protection versus pressure. At the same time, every player is unique: height and weight combine differently for each individual. By measuring and comparing these traits, coaches and scouts can better identify strengths, refine training, and develop players to reach their full potential.