

Biostatistics 2016 // Homework assignment #6

Practical case #1

The table shows height and muscle strength in 20 men. Evaluate the degree of association between height and muscle strength.

Height (cm)	171	172	173	173	173	175	176	176	176	176
Quadriceps muscle strength (N)	147	441	343	441	294	304	404	396	196	412
Height (cm)	176	177	177	177	178	179	179	179	180	180
Quadriceps muscle strength (N)	368	441	368	412	392	540	417	324	270	468

Practical case #2

The table shows age and muscle strength in 20 men. Evaluate the degree of association between age and muscle strength.

Age (years)	31	39	28	41	53	27	28	34	53	37
Quadriceps muscle strength (N)	147	441	343	441	294	304	404	396	196	412
Age (years)	49	48	32	49	41	41	54	31	33	35
Quadriceps muscle strength (N)	368	441	368	412	392	540	417	324	270	468

Practical case #3

The table shows sugar consumption and hyperactivity in boys. Evaluate the strength of association between these two variables.

Boys	Hyperactivity	Normal activity	Total
High sugar consumption	100	75	175
Low sugar consumption	75	108	183
Total	175	183	358