



National Center for Health Statistics

CDC > NCHS

National Health and Nutrition Examination Survey

- About NHANES +

- What's New +

- Webinar

- Questionnaires, Datasets, and Related Documentation +

- Survey Participants +

- Biospecimen Program +

- New Content and Proposal Guidelines



National Health and Nutrition Examination Survey

[Print](#)

Survey Participants



If you were selected, learn more about participating

Survey Data and Documentation




Access data, documentation & response rates

Publications and Products



View health and nutrition reports & CDC Growth Charts

Data Analysis Tutorials



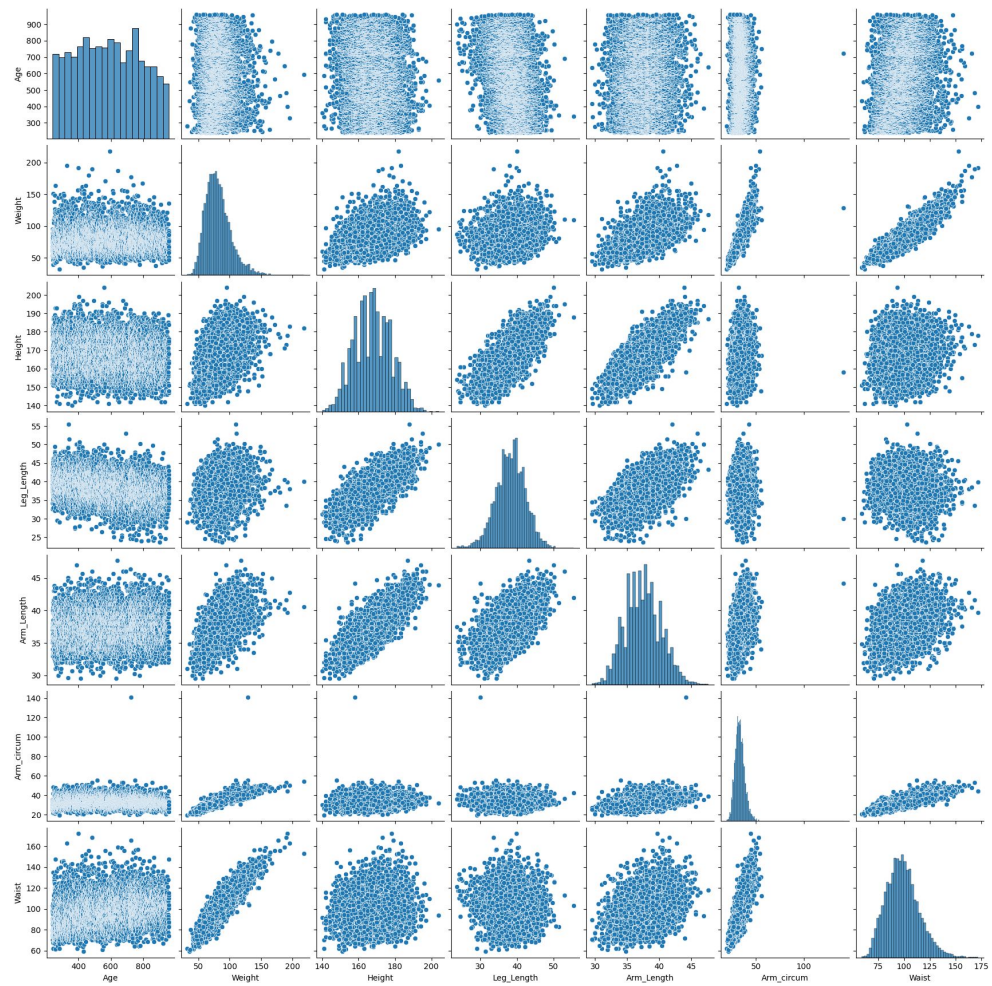
New: updated dietary tutorial module added

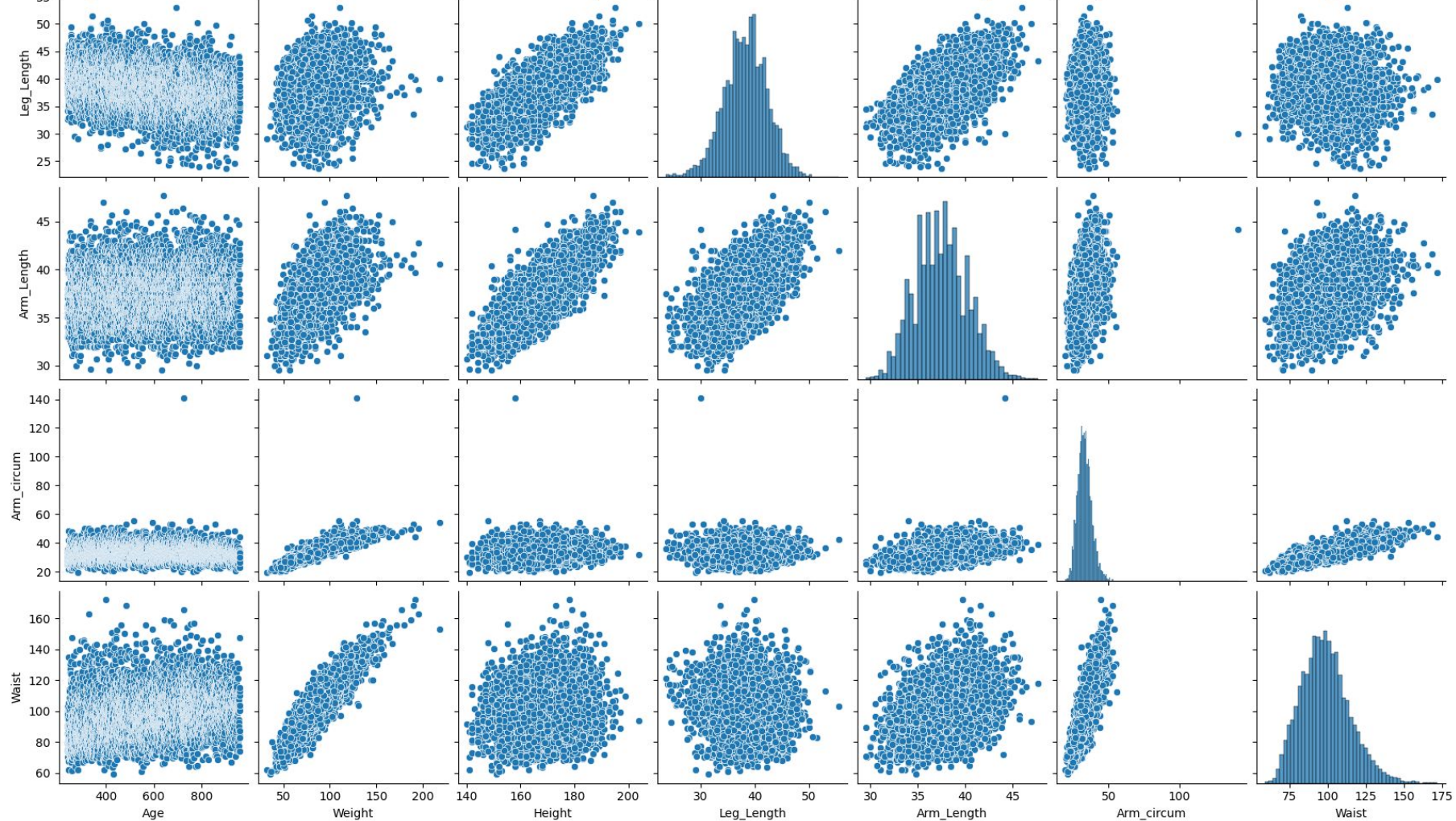
Review step-by-step guidance on using NHANES data

	Age	Weight	Height	Leg_Length	Arm_Length	Arm_circum	Waist
0	241	64.7	163	34.2	36.2	29.0	89.6
1	241	54.0	153	37.2	34.0	26.1	85.5
2	241	61.4	165	37.7	35.0	31.4	70.1
3	241	74.0	171	37.9	36.2	29.8	91.1
4	241	63.6	159	38.1	34.0	29.2	74.3
...
4974	958	89.5	184	43.0	42.8	32.2	112.8
4975	959	78.6	151	35.6	34.2	33.5	114.9
4976	959	86.5	175	38.6	41.5	32.8	100.2
4977	959	58.0	163	40.2	37.5	26.2	82.8
4978	959	76.2	168	40.8	39.5	29.8	103.5

NHANES dataset downloaded from
<https://www.statcrunch.com/app/index.php?dataid=1406047>

	count	mean	std	min	25%	50%	75%	max
Age	4979.0	584.586865	197.178091	241.0	418.0	584.00	748.0	959.0
Weight	4979.0	81.420707	20.300870	32.4	67.2	78.80	92.6	218.2
Height	4979.0	167.596104	10.033679	140.0	160.0	167.00	175.0	204.0
Leg_Length	4979.0	38.326592	4.034445	23.7	35.7	38.40	41.0	55.5
Arm_Length	4979.0	37.480699	2.754877	29.5	35.5	37.40	39.4	47.7
Arm_circum	4979.0	33.168829	5.208378	19.5	29.7	32.80	36.1	141.1
Waist	4978.0	98.828264	15.832760	59.1	87.5	97.95	108.3	172.0



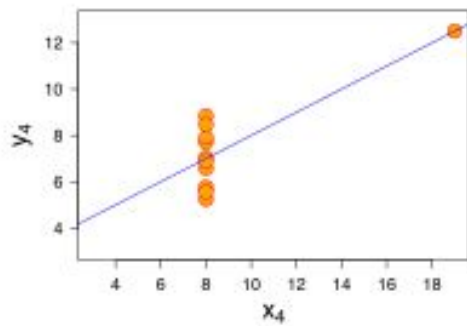
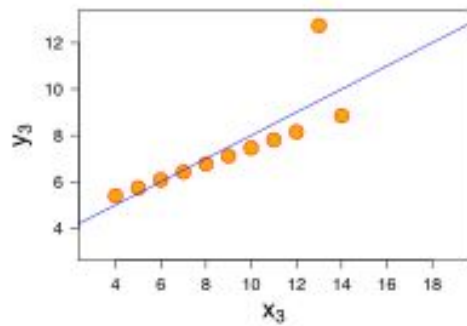
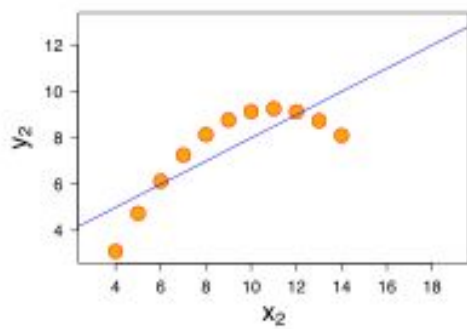
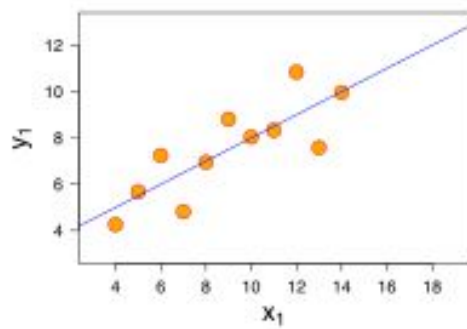


Pearson correlation

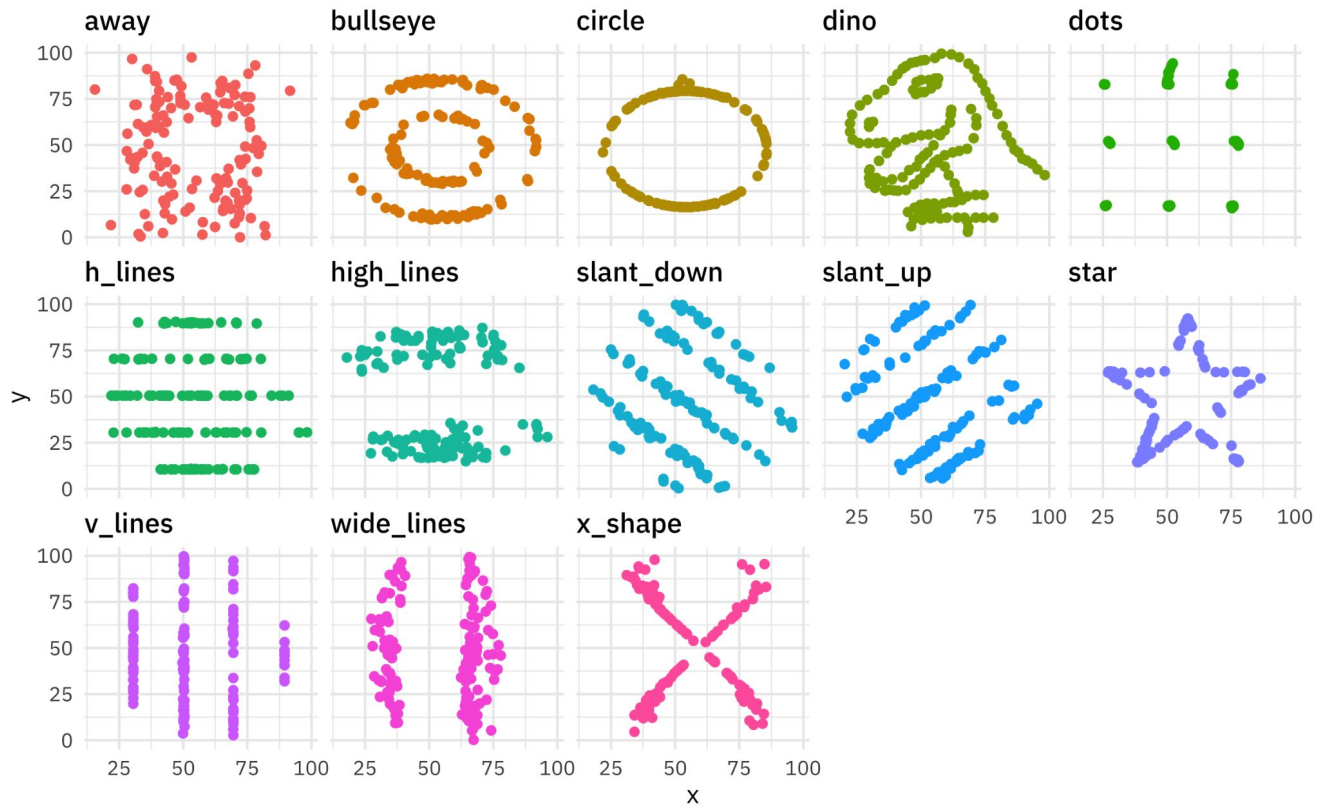
	Age	Weight	Height	Leg_Length	Arm_Length	Arm_circum	Waist
Age	1.000000	0.017480	-0.105107	-0.268362	0.053667	0.009340	0.227538
Weight	0.017480	1.000000	0.442543	0.237047	0.584044	0.859518	0.891869
Height	-0.105107	0.442543	1.000000	0.745212	0.799729	0.212407	0.181536
Leg_Length	-0.268362	0.237047	0.745212	1.000000	0.612864	0.075998	-0.028937
Arm_Length	0.053667	0.584044	0.799729	0.612864	1.000000	0.434724	0.401728
Arm_circum	0.009340	0.859518	0.212407	0.075998	0.434724	1.000000	0.820541
Waist	0.227538	0.891869	0.181536	-0.028937	0.401728	0.820541	1.000000

Spearman correlation

	Age	Weight	Height	Leg_Length	Arm_Length	Arm_circum	Waist
Age	1.000000	0.041815	-0.100562	-0.262123	0.050698	0.020158	0.256717
Weight	0.041815	1.000000	0.458639	0.268375	0.603943	0.893655	0.877276
Height	-0.100562	0.458639	1.000000	0.750491	0.793963	0.243011	0.174956
Leg_Length	-0.262123	0.268375	0.750491	1.000000	0.618131	0.115171	-0.017040
Arm_Length	0.050698	0.603943	0.793963	0.618131	1.000000	0.455924	0.395654
Arm_circum	0.020158	0.893655	0.243011	0.115171	0.455924	1.000000	0.810242
Waist	0.256717	0.877276	0.174956	-0.017040	0.395654	0.810242	1.000000



Anscombe's quartet; zdroj Wikipedia



Datasaurus dozen

I USED TO THINK
CORRELATION IMPLIED
CAUSATION.



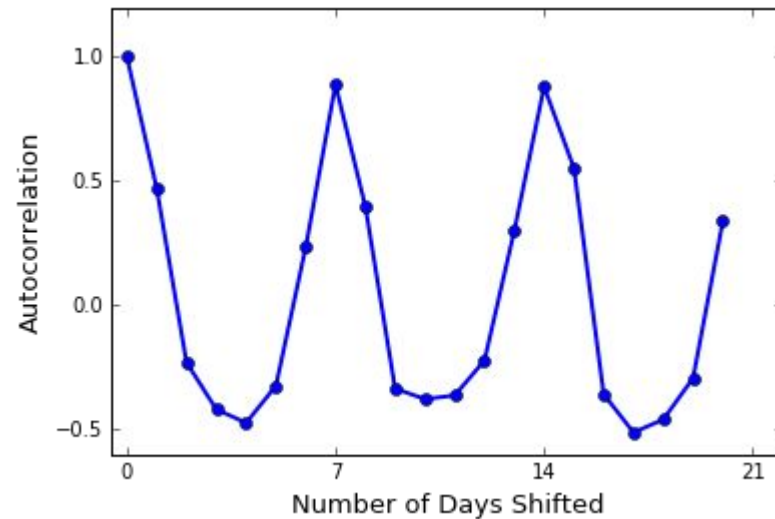
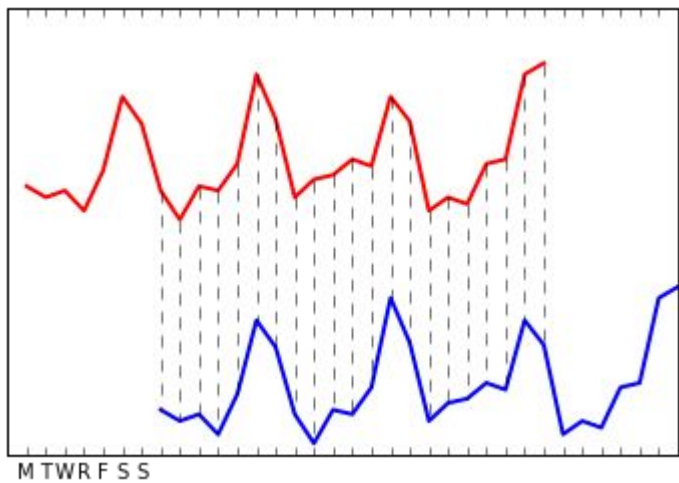
THEN I TOOK A
STATISTICS CLASS.
NOW I DON'T.



SOUNDS LIKE THE
CLASS HELPED.

WELL, MAYBE.





Autokorelácia, Skiena kap. 2.11