



**Name (p\_id):** (30)  
**Sex:** Female  
**Age:** 50

**BMI:** 21.2  
**Resting Heart Rate:** 73 bpm  
**Blood Pressure:** 88/122 mm Hg

**Smoking Status :** Current  
**Health Condition:** Hypertension

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned (*1000)	Fitness Level
January	Running	76	High	9168	7.09	4.79	2.42	126	12	0.85
February	Basketball	81	Medium	9477	6.92	3.91	2.6	128	12	2.87
March	Weight Training	68	High	10156	7	5.2	2.62	126	8	5.11
April	Weight Training	72	Medium	10747	7.07	5.09	2.59	128	12	7.07
May	Cycling	58	Medium	10058	7.06	4.33	2.26	125	9	8.91
June	Basketball	75	Medium	9207	7.05	5.17	2.56	127	17	10.61
July	Swimming	74	High	8286	6.65	4.62	2.53	124	13	12.29
August	HIIT	74	Low	7325	6.95	6	2.24	127	26	13.77
September	Running	80	Medium	6673	7.37	4.36	2.38	120	16	14.88
October	Weight Training	69	Medium	7610	6.71	7.17	2.37	123	15	15.91
November	Cycling	64	Medium	7479	7.17	4.07	2.28	123	13	16.88
December	HIIT	72	High	8269	7.13	4.54	2.48	130	21	18.08

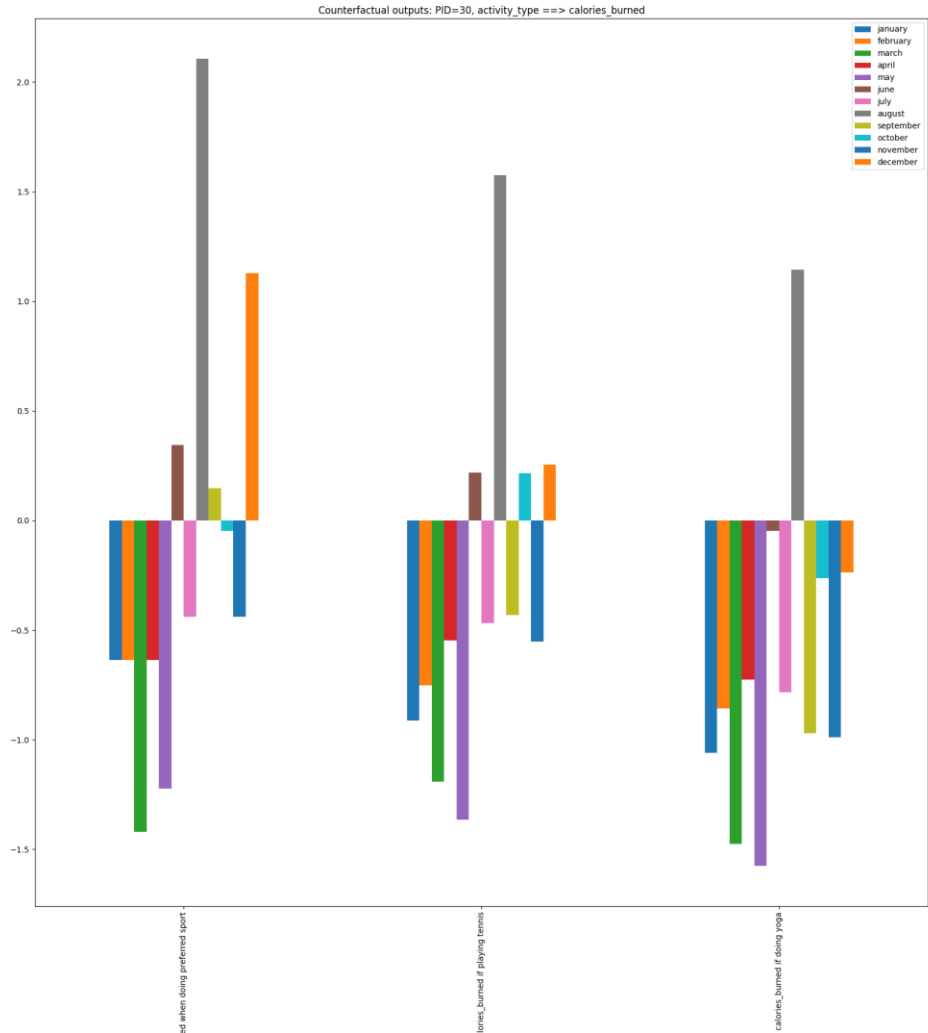
Causal question: “Does the type of activity I do have an impact on the calories I burn?”

activity\_type ==> calories\_burned



Causal question: “Does the type of activity I do have an impact on the calories I burn?”

activity\_type ==> calories\_burned





**Name (p\_id):** (8)

**Sex:** Male

**Age:** 54

**BMI:** 28.7

**Resting Heart Rate:** 72 bpm

**Blood Pressure:** 89/129 mm Hg

**Smoking Status :** Former

**Health Condition:** Hypertension

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned (*1000)	Fitness Level
January	Yoga	73	Medium	8628	7.02	5.76	2.33	121	9	0.83
February	Tennis	66	Low	9462	7.12	4.61	2.48	121	18	2.27
March	Basketball	66	Low	10396	7.1	5.62	2.35	120	15	3.87
April	HIIT	76	High	10478	6.93	5.86	2.32	122	18	5.79
May	Yoga	72	Medium	9784	7.26	5.05	2.78	128	15	7.58
June	Weight Training	69	Low	9484	6.89	6.07	2.33	121	26	9.07
July	Cycling	69	Low	7930	7.11	6.16	2.74	127	23	10.53
August	Basketball	68	Medium	7741	7.17	5.71	2.64	119	19	11.82
September	Tennis	79	Medium	7220	6.82	5.1	2.46	122	32	12.88
October	Tennis	72	Low	6568	7.14	6.62	2.36	125	26	14.11
November	Tennis	70	High	7433	7.15	3.17	2.51	123	30	15.3
December	Tennis	66	Medium	7967	6.65	4.38	2.31	122	23	16.43

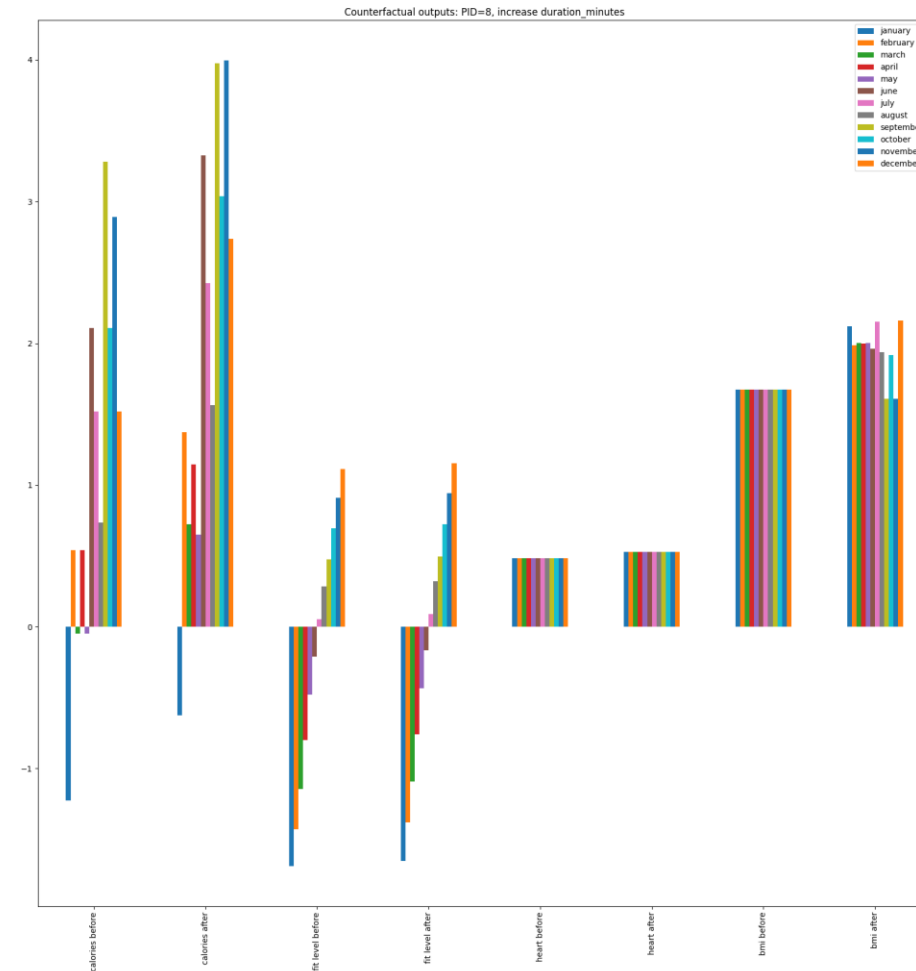
Causal question: “I am going to train more! What effects will I notice?”

increase duration\_minutes



Causal question: *“I am going to train more! What effects will I notice?”*

```
increase duration_minutes
```





**Name (p\_id):** (165)  
**Sex:** Female  
**Age:** 39

**BMI:** 18.7  
**Resting Heart Rate:** 74 bpm  
**Blood Pressure:** 81/105 mm Hg

**Smoking Status :** Former  
**Health Condition:** Diabetes

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned ( *1000)	Fitness Level
January	Swimming	67	High	8351	7.06	5.91	2.37	134	10	1.07
February	Swimming	71	Medium	9921	6.94	5.55	2.38	135	10	2.82
March	Weight Training	69	Medium	9885	7.03	5.09	2.48	135	6	4.6
April	Walking	69	Medium	9167	6.93	4.46	2.55	138	7	6.31
May	Walking	79	High	10069	7.18	5.26	2.65	133	11	8.49
June	Weight Training	60	Low	8584	7.16	4.56	2.54	132	12	9.96
July	Yoga	70	Medium	7986	6.82	5.16	2.52	131	16	11.34
August	Swimming	73	Medium	7191	6.91	4.57	2.58	135	13	12.76
September	Swimming	62	Medium	6970	6.98	6.39	2.44	131	16	13.96
October	Cycling	68	Medium	6406	7.2	4.26	2.28	136	22	15.42
November	Swimming	73	Low	7426	6.63	5.24	2.54	128	17	17.07
December	Swimming	76	Low	8402	7	4.62	2.32	131	17	18.39

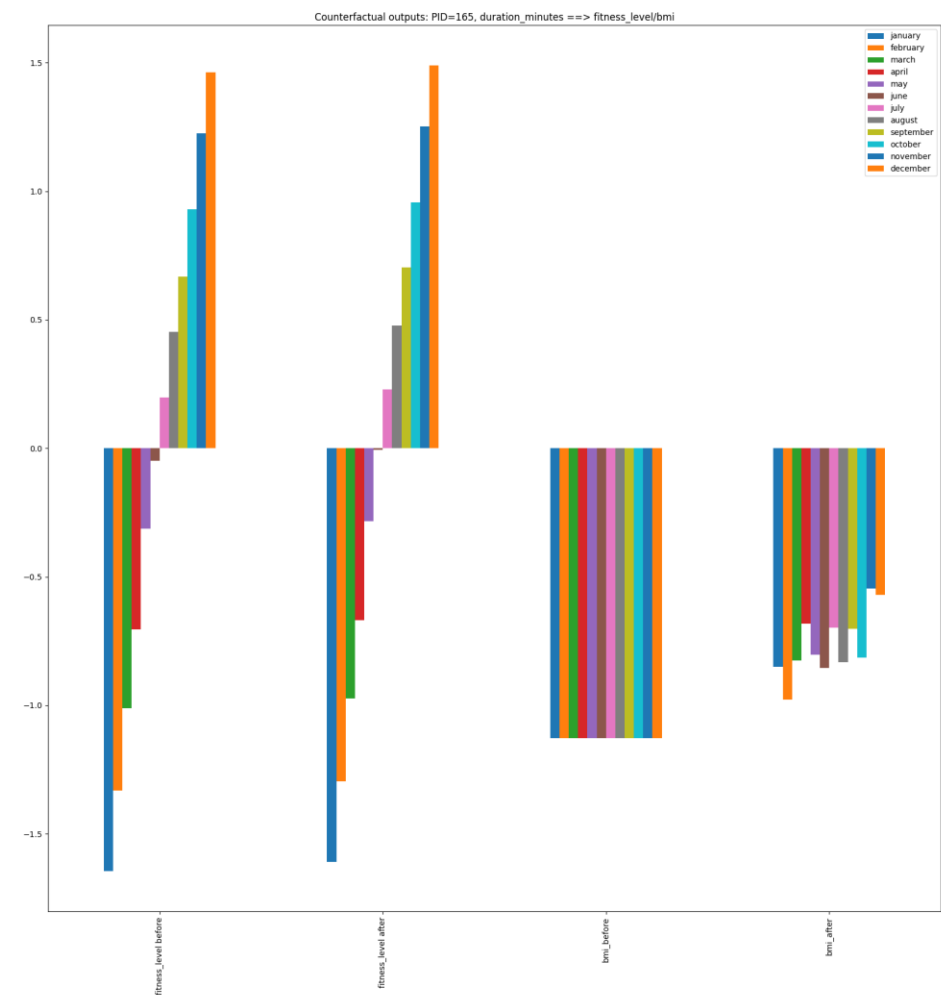
Causal question: “*Had I increased the amount of exercise I did, would I be in better shape?*”

```
duration_minutes ==> fitness_level + duration_minutes ==> bmi
```



# Causal question: “If I increased the amount of exercise I do, would I be in better shape?”

`duration_minutes ==> fitness_level + duration_minutes ==> bmi`





**Name (p\_id):** (262)  
**Sex:** Male  
**Age:** 40

**BMI:** 21.2  
**Resting Heart Rate:** 76 bpm  
**Blood Pressure:** 81/144 mm Hg

**Smoking Status :** Current  
**Health Condition:** Diabetes

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned ( *1000)	Fitness Level
January	Dancing	56	Medium	8656	7.29	5.39	2.51	132	9	0.6
February	HIIT	75	Medium	9742	7	5.75	2.57	128	11	2.09
March	Running	81	Medium	9656	7.34	5.22	2.62	130	15	4
April	Weight Training	65	Medium	9759	7.27	5.6	2.69	130	12	6.1
May	Tennis	76	Medium	9844	6.99	5.22	2.41	135	17	8.11
June	Swimming	61	Low	8824	7.25	4.91	2.37	132	13	10.06
July	Yoga	70	High	8091	7.15	5.58	2.39	132	16	11.54
August	Weight Training	77	Medium	6934	7.4	5.11	2.41	127	17	13.28
September	Walking	64	Medium	6758	6.91	4.8	2.61	125	15	14.72
October	HIIT	64	High	6476	7.12	4.35	2.56	137	17	15.93
November	Running	61	Medium	7220	7.12	5.06	2.66	131	21	17.18
December	Weight Training	73	Medium	8363	6.87	5.11	2.46	132	18	18.54

Causal question: “Is it better to walk more or to train harder to get in better shape?”

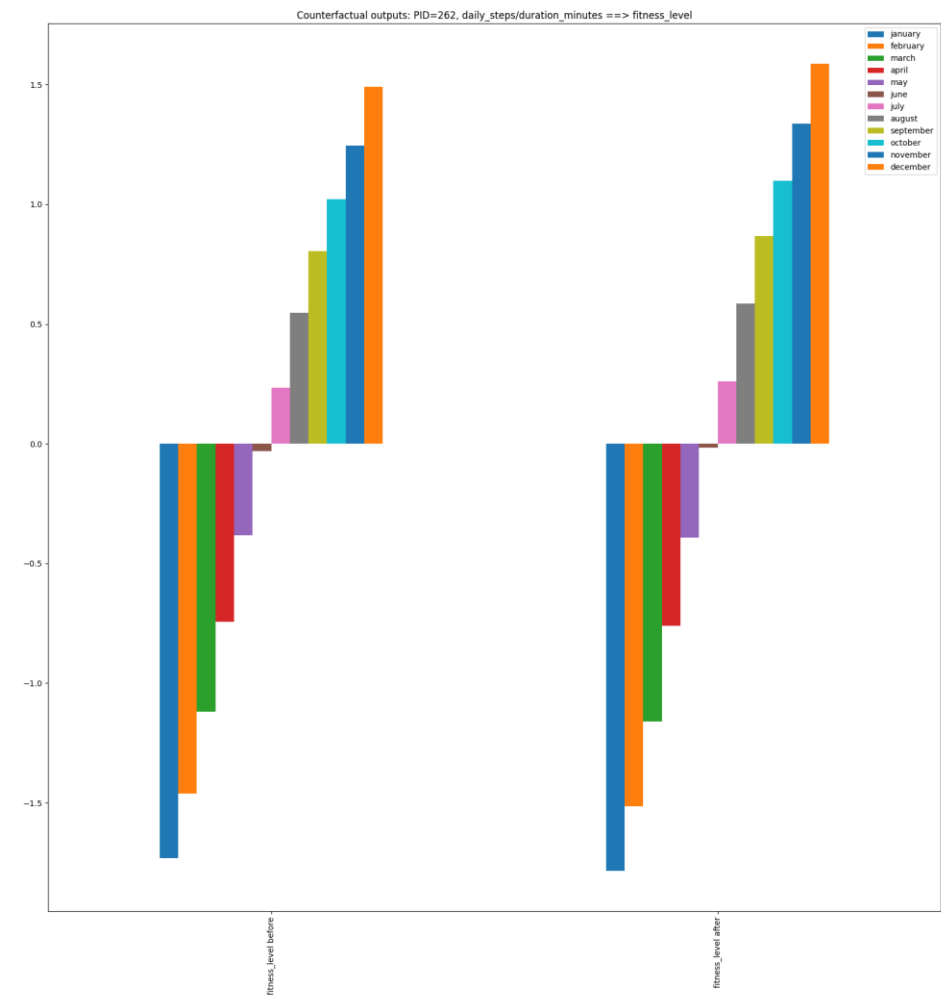
```
daily_steps ==> fitness_level + duration_minutes ==> fitness_level
```





# Causal question: “How beneficial is it to walk more and train harder to get in better shape?”

daily\_steps ==> fitness\_level + duration\_minutes ==> fitness\_level





**Name (p\_id):** (108)

**Sex:** Female

**Age:** 39

**BMI:** 23.8

**Resting Heart Rate:** 70 bpm

**Blood Pressure:** 74/98 mm Hg

**Smoking Status :** Current

**Health Condition:** Asthma

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned (*1000)	Fitness Level
January	Cycling	82	Medium	8802	7.11	5	2.68	137	11	0.88
February	Tennis	77	Medium	9261	6.62	5.31	2.49	131	13	2.96
March	HIIT	68	Medium	9973	7.14	5.21	2.51	132	13	5.17
April	Basketball	74	Low	9519	6.72	5.39	2.21	131	15	7.06
May	HIIT	67	Medium	8744	7.28	5.74	2.54	132	16	8.89
June	Basketball	65	Medium	9105	7.13	5	2.5	136	13	10.92
July	Swimming	64	Medium	7768	7.19	5.22	2.62	134	12	12.47
August	Walking	56	Low	7384	7.27	5.6	2.25	126	12	13.59
September	Basketball	65	Medium	7226	6.75	6	2.59	131	17	14.62
October	Cycling	71	Low	7167	7.03	4.9	2.39	131	18	15.91
November	Cycling	56	Medium	8043	7.21	4.88	2.76	131	15	17.25
December	Cycling	66	Medium	7685	7.25	5.62	2.74	134	12	18.32

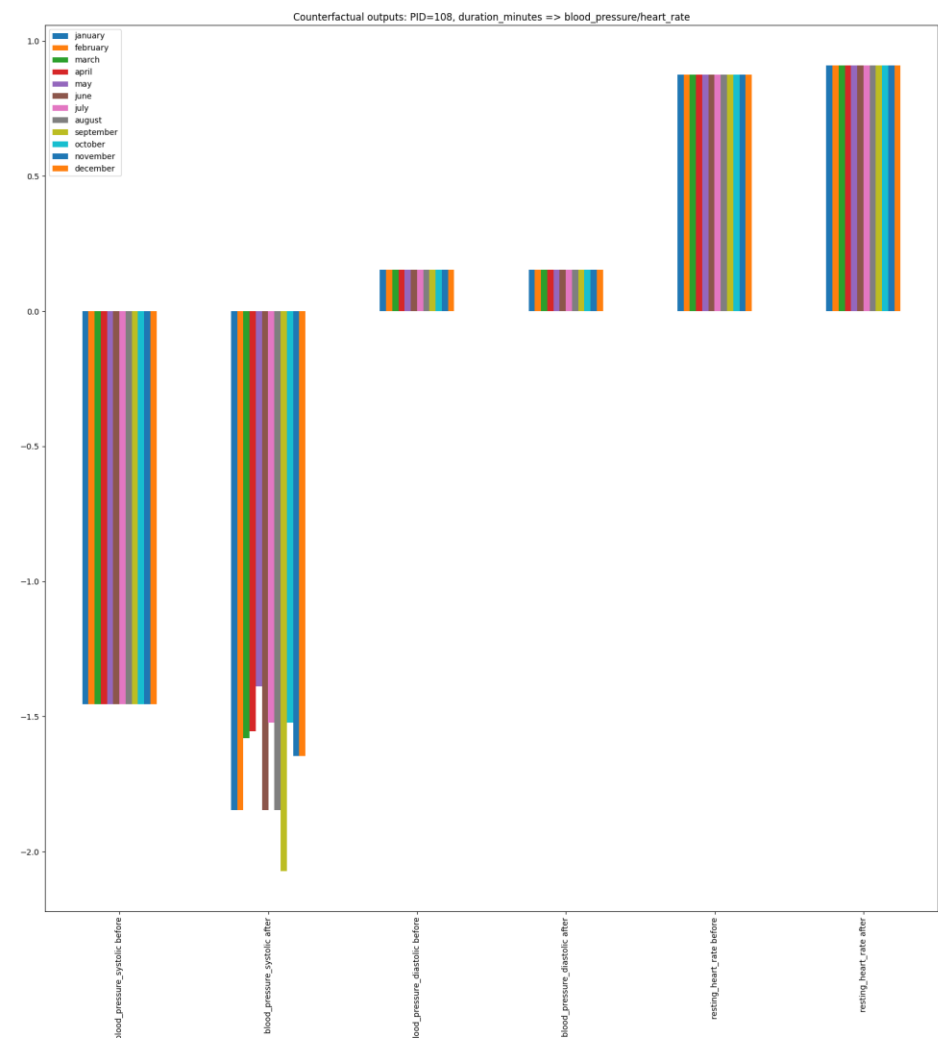
Causal question: “If I train more, will it be good for my heart?”

duration\_minutes ==> blood\_pressure\_systolic/blood\_pressure\_diastolic/average\_heart\_rate



Causal question: “If I train more, will it be good for my heart?”

duration\_minutes ==> blood\_pressure\_systolic/blood\_pressure\_diastolic/average\_heart\_rate





**Name (p\_id):** (6)

**Sex:** Male

**Age:** 61

**BMI:** 15.7

**Resting Heart Rate:** 68 bpm

**Blood Pressure:** 78/123 mm Hg

**Smoking Status :** Never

**Health Condition:** Diabetes

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned ( *1000)	Fitness Level
January	Swimming	63	Medium	8949	7.16	6.67	2.41	114	8	0.88
February	Cycling	56	Low	9585	7.22	5.52	2.51	115	9	2.34
March	HIIT	75	Low	10386	7.17	5.25	2.47	115	10	4
April	Weight Training	73	High	9534	6.97	4.71	2.4	121	17	6.08
May	Walking	73	Medium	9244	7.1	5.8	2.5	114	9	7.91
June	Swimming	67	Low	9002	6.7	6.39	2.6	115	12	9.67
July	Weight Training	74	Low	7949	7.15	4.82	2.51	112	15	11.28
August	Cycling	79	High	7786	7.12	5	2.64	113	17	12.68
September	Cycling	58	High	7067	7.34	5.19	2.64	114	11	13.87
October	Dancing	66	Medium	6655	6.97	4.5	2.51	117	16	14.99
November	Tennis	59	Medium	7652	7.12	5.25	2.13	109	13	15.93
December	Dancing	67	Low	7609	6.94	6.19	2.51	113	15	16.98

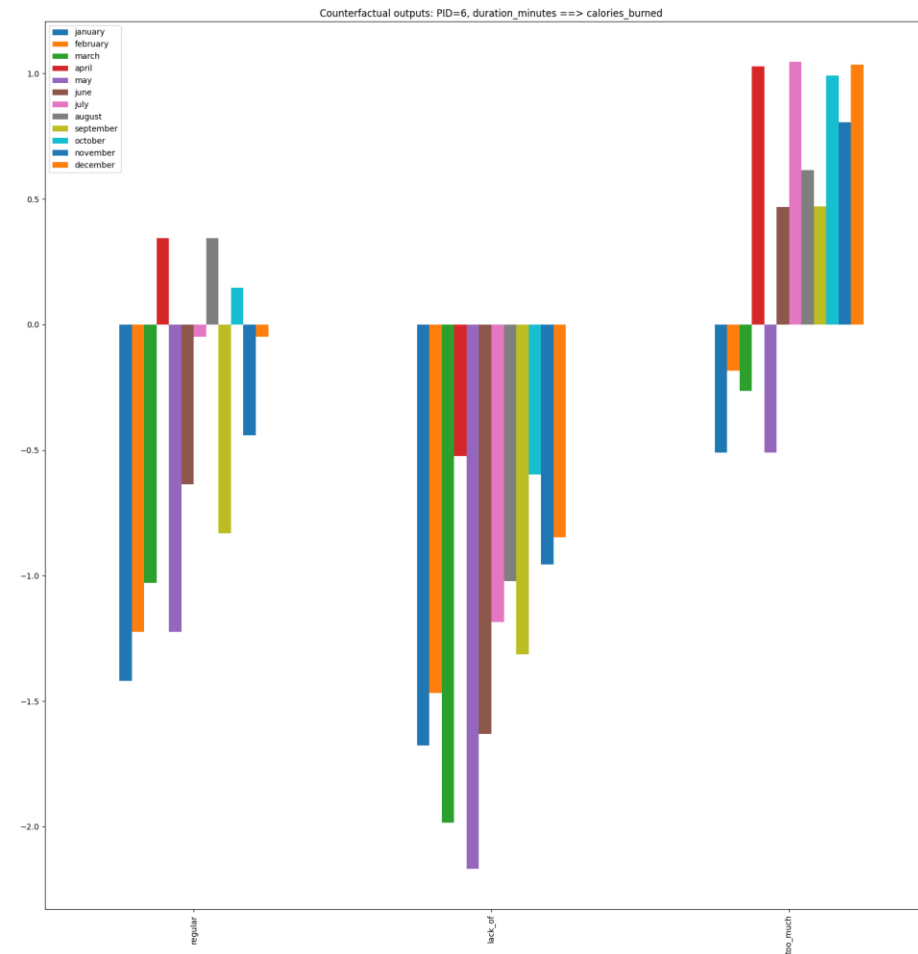
Causal question: “Now I am retired and have more time for sports. Will I lose weight?”

duration\_minutes ==> calories\_burned



Causal question: “*Now I am retired and have more time for sports. Will I lose weight?*”

`duration_minutes ==> calories_burned`





**Name (p\_id):** (41)  
**Sex:** Female  
**Age:** 52

**BMI:** 22.5  
**Resting Heart Rate:** 78 bpm  
**Blood Pressure:** 79/124 mm Hg

**Smoking Status :** Never  
**Health Condition:** Asthma

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned ( *1000)	Fitness Level
January	Running	82	Low	9037	6.55	5.62	2.4	123	13	1.22
February	Dancing	68	Medium	9827	6.82	5.39	2.46	125	8	3.24
March	Weight Training	68	Medium	9877	7.43	5.54	2.38	123	12	5.33
April	Tennis	58	High	10161	7.02	5.46	2.51	124	10	7.18
May	HIIT	64	Low	9881	6.68	5	2.53	121	14	8.78
June	Tennis	69	Low	8115	7.13	4.53	2.61	124	16	10.11
July	Swimming	70	Medium	8077	7.32	4.71	2.53	128	16	11.64
August	Walking	65	Low	7315	6.94	5	2.31	123	13	13.13
September	Dancing	89	Medium	6920	7.24	5.73	2.45	122	13	14.68
October	Dancing	74	Low	7025	7.05	5.6	2.42	123	15	16.3
November	Weight Training	62	Low	7145	6.73	5.1	2.3	123	15	17.93
December	Basketball	76	Medium	7767	6.87	4.54	2.36	120	16	19.33

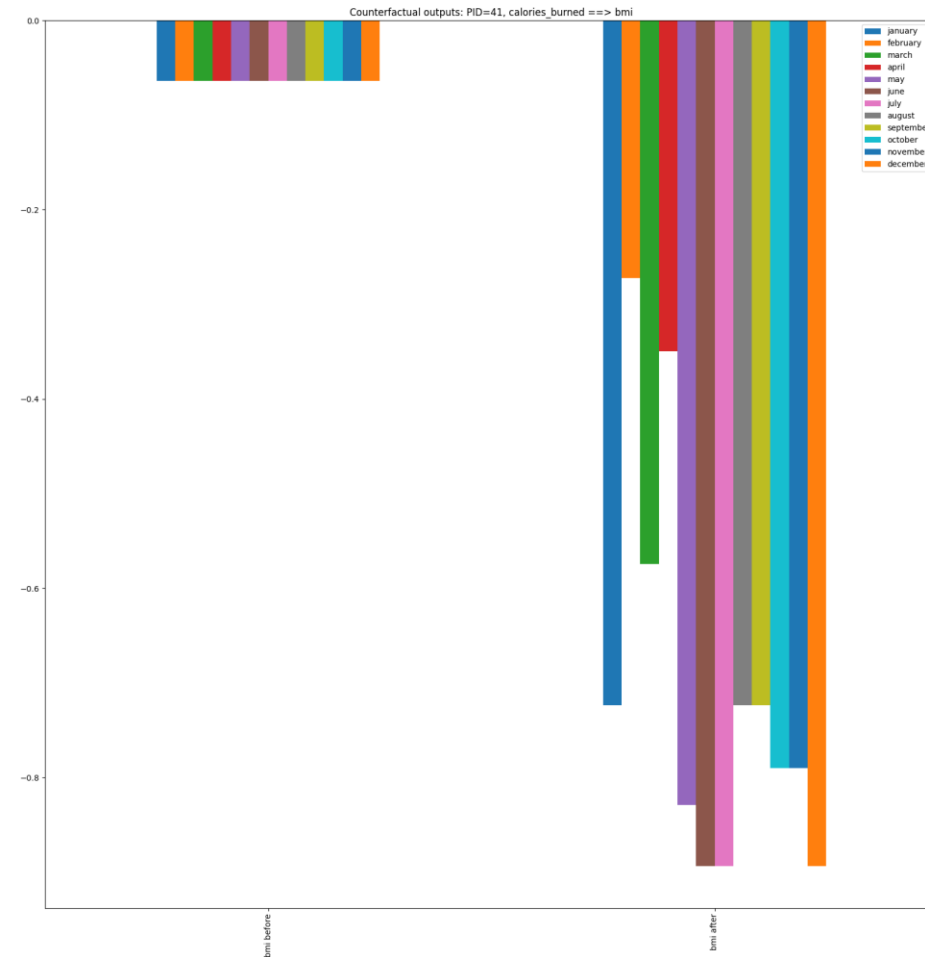
Causal question: “I know I’ll eat a lot and train less on vacation; will it be bad for my weight?”

calories\_burned ==> bmi



Causal question: “*I know I’ll eat a lot and train less on vacation; will it be bad for my weight?*”

`calories_burned ==> bmi`





**Name (p\_id):** (2)

**Sex:** Male

**Age:** 40

**BMI:** 23.7

**Resting Heart Rate:** 82 bpm

**Blood Pressure:** 78/128 mm Hg

**Smoking Status :** Never

**Health Condition:** None

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned ( *1000)	Fitness Level
January	Cycling	63	Low	8503	6.92	5.67	2.68	133	12	0.73
February	HIIT	73	Low	9120	7.09	4.9	2.51	131	12	2.23
March	Swimming	74	Medium	9978	7.18	6	2.57	138	16	4.44
April	Tennis	69	Medium	10489	6.76	5.29	2.45	134	17	6.54
May	HIIT	70	Low	9990	7.01	5.38	2.62	131	17	8.35
June	Weight Training	66	Medium	9336	7.05	5	2.47	130	17	10.37
July	Tennis	76	Low	8133	6.97	5.16	2.49	127	21	12.16
August	Dancing	77	High	7452	6.98	6.62	2.45	131	25	13.69
September	Running	73	Low	6385	6.99	5.3	2.42	132	16	15.18
October	Walking	74	Medium	6726	6.82	4.39	2.53	134	20	16.84
November	Cycling	72	Low	7372	7.02	5.26	2.58	128	22	18.33
December	Dancing	69	Low	8123	6.93	4.13	2.63	133	16	19.71

Causal question: “I don’t feel like walking a lot after work anymore... Will this be bad for me?”

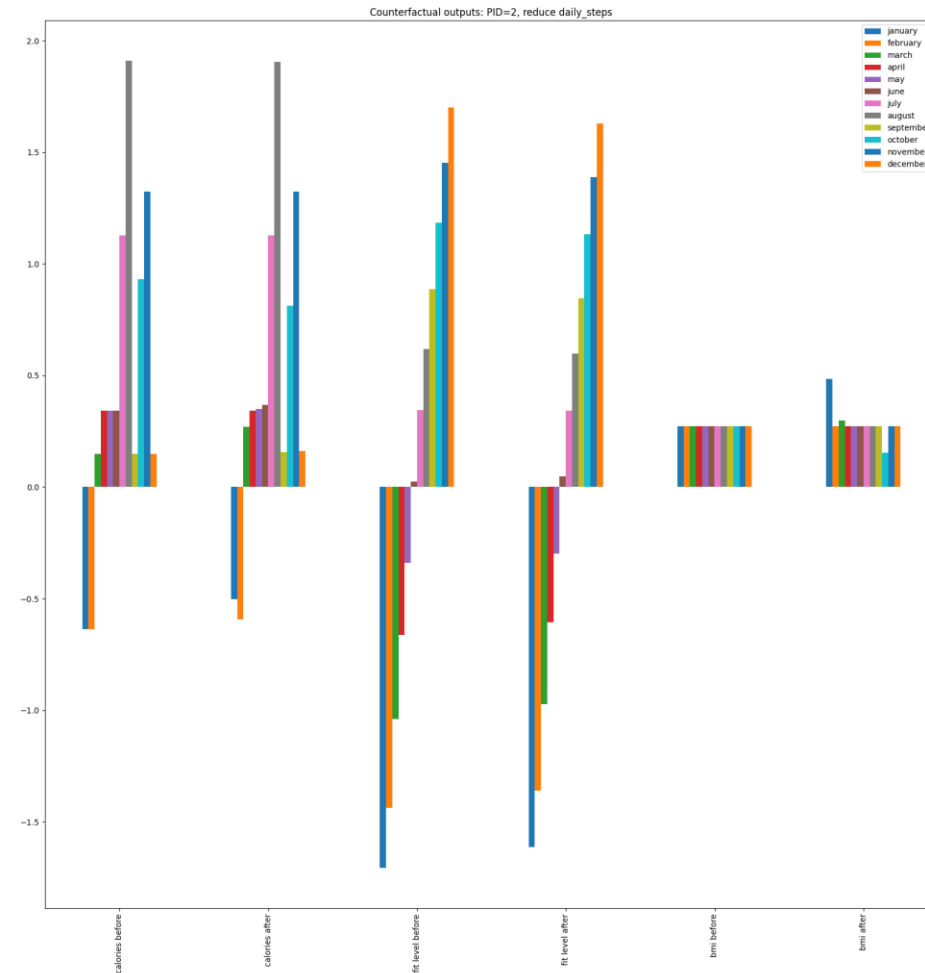
decrease daily\_steps





Causal question: “*I don’t feel like walking a lot after work anymore... Will this be bad for me?*”

```
decrease daily_steps
```





**Name (p\_id):** (26)  
**Sex:** Female  
**Age:** 26

**BMI:** 18.4  
**Resting Heart Rate:** 75 bpm  
**Blood Pressure:** 89/115 mm Hg

**Smoking Status :** Never  
**Health Condition:** Hypertension

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned (*1000)	Fitness Level
January	Basketball	71	High	8693	7.48	5.71	2.49	152	6	0.73
February	Tennis	73	Medium	9420	7.21	4.95	2.47	142	11	2.48
March	Dancing	70	Low	10522	7.07	5.04	2.44	146	10	4.37
April	Weight Training	67	Low	10271	6.68	5.26	2.47	135	9	6.12
May	Dancing	68	Medium	9319	6.92	5.42	2.42	141	10	7.77
June	Weight Training	62	Low	8379	7.12	5.3	2.36	136	9	9.32
July	Tennis	78	Medium	8475	7.2	4.32	2.54	147	18	11.07
August	Basketball	73	Low	7037	6.99	3.82	2.79	144	15	12.65
September	Cycling	62	Medium	6813	6.82	4.12	2.28	145	9	14.02
October	Dancing	61	High	7679	6.73	4.35	2.33	145	17	15.25
November	Running	64	Medium	7010	6.99	4.47	2.62	142	19	16.52
December	Dancing	75	High	8176	7.17	4.28	2.41	141	20	18

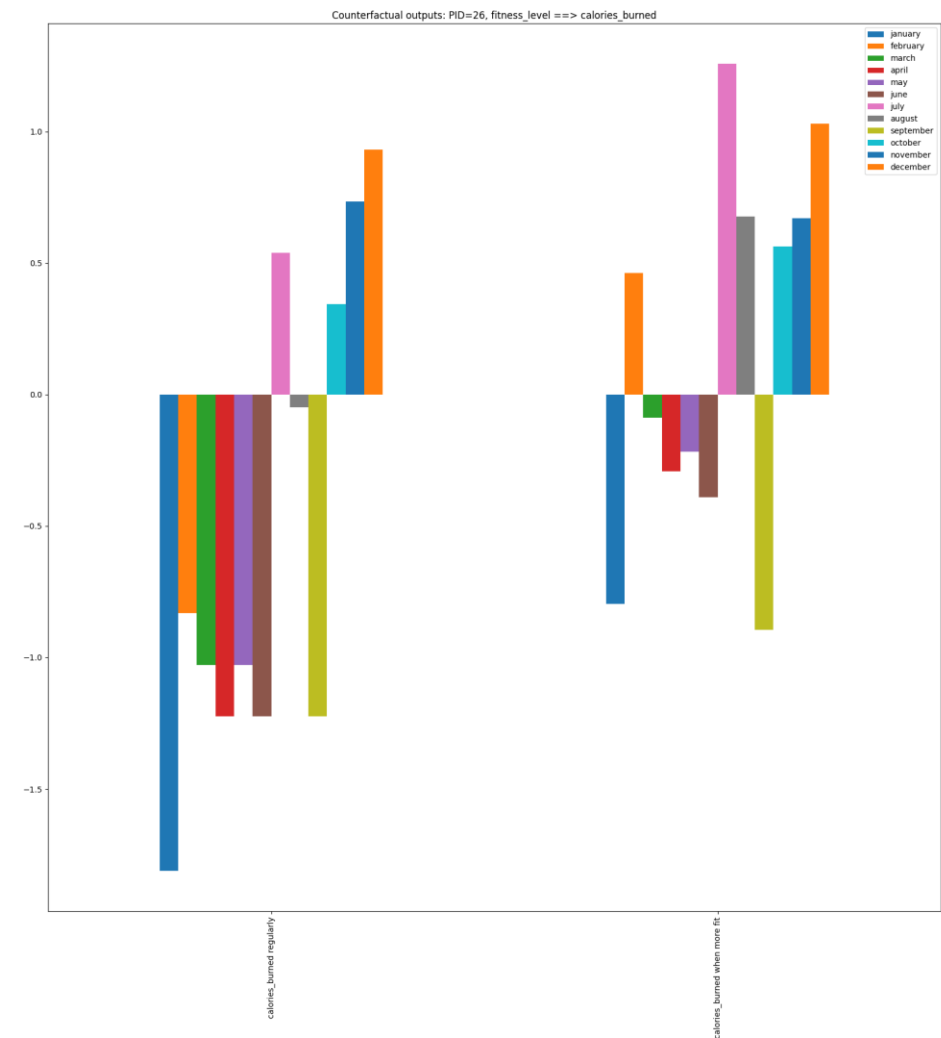
Causal question: “What impact does my fitness level have on the calories I burn?”

Fitness\_level ==> calories\_burned



# Causal question: “What impact does my fitness level have on the calories I burn?”

Fitness\_level ==> calories\_burned





**Name (p\_id):** (5)  
**Sex:** Male  
**Age:** 50

**BMI:** 29.1  
**Resting Heart Rate:** 70 bpm  
**Blood Pressure:** 80/139 mm Hg

**Smoking Status :** Current  
**Health Condition:** None

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned ( *1000)	Fitness Level
January	Cycling	66	Medium	9165	7.23	4.61	2.73	125	13	0.72
February	HIIT	75	Medium	10041	7.17	4.52	2.57	128	25	2.39
March	Running	67	Low	9932	7.09	5.25	2.59	127	12	4.45
April	Tennis	74	Medium	9997	6.93	6.3	2.45	120	17	6.45
May	Cycling	72	High	9473	7.15	5.31	2.51	127	20	8.69
June	HIIT	73	Medium	8599	7.04	4.89	2.55	129	27	10.67
July	Cycling	71	Medium	7779	7.09	4.5	2.47	123	17	12.27
August	Running	73	Medium	6930	7.05	4.82	2.44	123	18	14.02
September	Swimming	71	Low	6423	6.88	4.62	2.35	125	18	15.37
October	Walking	63	Low	6700	7.31	6.18	2.78	120	15	16.38
November	Running	59	Medium	6908	7.42	5.17	2.52	120	19	17.18
December	Tennis	68	Medium	7756	6.96	4.43	2.63	128	26	18.21

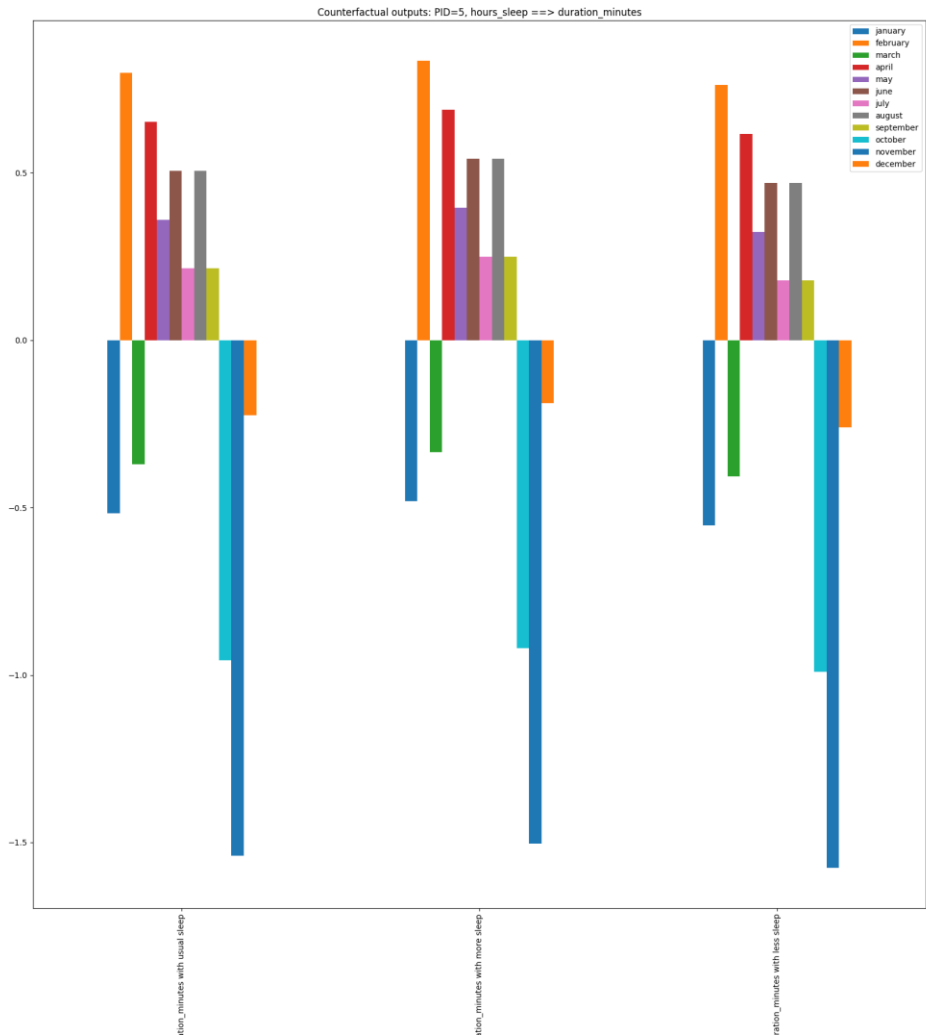
Causal question: “Does my sleep schedule influence how long I can train for?”

```
hours_sleep ==> duration_minutes
```



# Causal question: “Does my sleep schedule influence how long I can train for?”

hours\_sleep ==> duration\_minutes





**Name (p\_id):** (11)

**Sex:** Female

**Age:** 43

**BMI:** 22.2

**Resting Heart Rate:** 69 bpm

**Blood Pressure:** 67/120 mm Hg

**Smoking Status :** Former

**Health Condition:** None

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned ( *1000)	Fitness Level
January	Cycling	76	Medium	8714	7.14	4.64	2.3	131	12	1.1
February	Tennis	83	Medium	9542	7.28	4.96	2.6	134	17	3.25
March	Basketball	77	Medium	10241	7.23	5.14	2.39	126	14	5.65
April	Walking	72	Medium	10026	6.97	5.88	2.52	130	16	7.63
May	Cycling	75	Low	10047	7.03	5.72	2.38	129	14	9.84
June	Dancing	67	Medium	9823	7.09	5.45	2.55	134	20	11.84
July	Cycling	59	Low	7823	7.03	5.74	2.61	130	12	13.36
August	Weight Training	65	Medium	6947	7.4	5.94	2.63	131	14	14.71
September	Swimming	72	Medium	6940	7.41	6.27	2.59	125	18	15.94
October	Yoga	75	Low	5883	7.25	4.12	2.79	122	12	16.86
November	Tennis	67	Low	7338	7.1	4.52	2.61	123	14	18.01
December	Weight Training	72	Low	7682	7.39	5.1	2.02	123	19	19.15

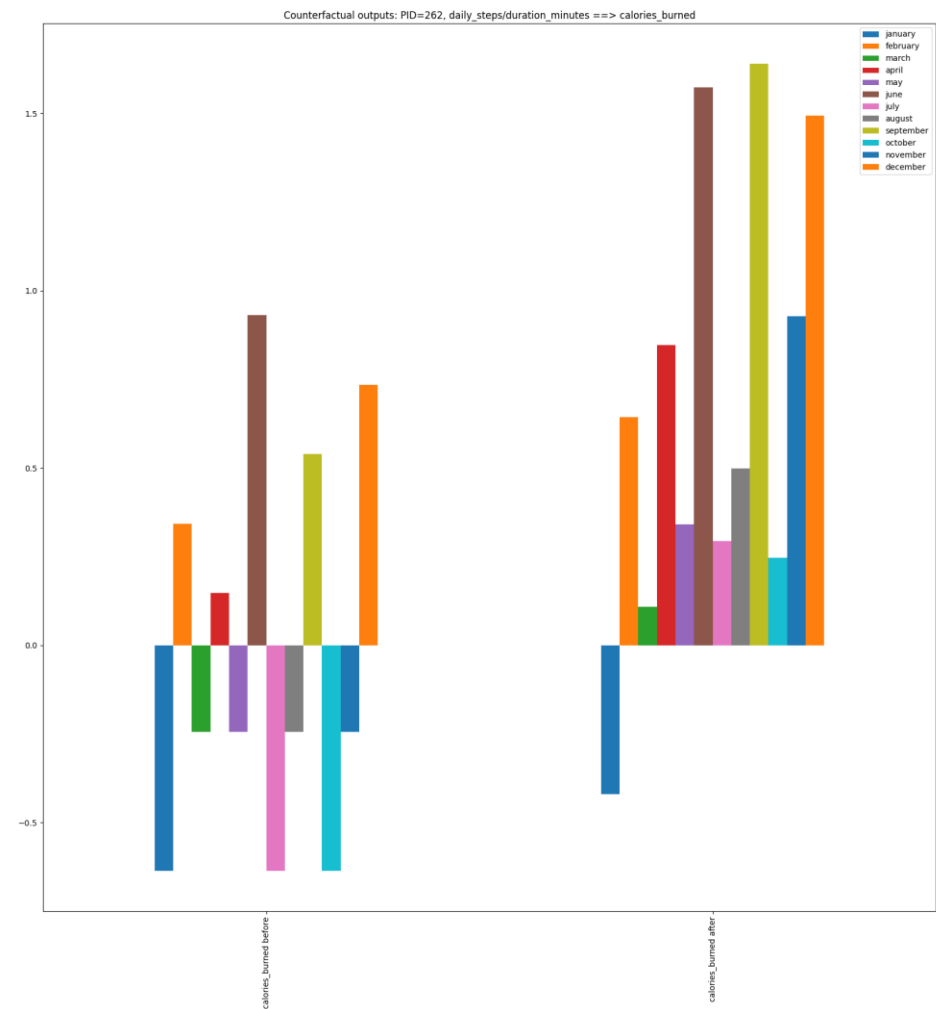
Causal questions: “I’ve been told that I need to walk and train more. What effects will this have on my physique?”

duration\_minutes/daily\_steps => calories\_burned



Causal questions: “I’ve been told that I need to walk and train more.  
What effects will this have on my physique?”

`duration_minutes/daily_steps => calories_burned`





**Name (p\_id):** (172)

**Sex:** Male

**Age:** 59

**BMI:** 25.2

**Resting Heart Rate:** 69 bpm

**Blood Pressure:** 76/129 mm Hg

**Smoking Status :** Former

**Health Condition:** Asthma

	FITNESS			LIFESTYLE				HEALTH	RESULTS	
	Activity	Duration	Intensity	Daily Steps	Sleep Hours	Stress Level	Hydration Level	Average Heart Rate	Calories Burned ( *1000)	Fitness Level
January	Basketball	78	Medium	8604	7.02	4.96	2.69	116	13	1.16
February	Basketball	66	High	9522	6.96	4.95	2.54	123	13	3.13
March	Weight Training	72	Low	10037	6.96	4.5	2.45	117	17	4.81
April	Walking	66	Low	10265	7.13	5.24	2.54	114	12	6.53
May	Running	61	Low	10611	6.66	3.9	2.56	114	15	8.11
June	Weight Training	68	High	8835	6.95	5.11	2.69	116	18	9.62
July	Yoga	82	Low	7938	7.35	5.45	2.58	116	8	11.37
August	Basketball	65	Low	7705	7.26	4.29	2.63	118	15	13.07
September	Dancing	66	High	6230	7.27	6.2	2.52	115	16	14.38
October	Cycling	64	Low	7305	7.25	5.36	2.49	119	12	15.45
November	Running	69	Low	7482	6.45	5.23	2.33	116	22	16.51
December	Walking	77	Low	7820	6.94	5.36	2.62	113	11	17.69

Causal question: “Does training for longer have a good effect on my resting heart rate?”

```
duration_minutes ==> resting_heart_rate
```





# Causal question: “Does training for longer have a good effect on my resting heart rate?”

`duration_minutes ==> resting_heart_rate`

