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Example 1: Separation holds but not sufficiency.

Gender does not affect Vegetables given ground truth Hyperlipidemia, but given gender, we cannot say that Vegetables is independent of ground truth Hyperlipidemia.

Vegetables	Hyperlipidemia	Gender	P(A, C, Y)
<400 g/d	YES	Female	0.086
<400 g/d	YES	Male	0.115
<400 g/d	NO	Female	0.093
<400 g/d	NO	Male	0.091
400-500 g/d	YES	Female	0.042
400-500 g/d	YES	Male	0.056
400-500 g/d	NO	Female	0.107
400-500 g/d	NO	Male	0.104
> 500  g/d	YES	Female	0.020
>500 g/d	YES	Male	0.027
>500 g/d	NO	Female	0.130
>500 g/d	NO	Male	0.127

Example 2: Sufficiency holds but not separation.

Region is independent of ground truth Vegetables given Hyperlipidemia, but not independent of Hyperlipidemia given ground truth Vegatables.

Region	Vegetables	Hperlipidemia	P(A, C, Y)
Countryside	<400 g/d	YES	0.051
Countryside	<400 g/d	NO	0.025
Countryside	400-500 g/d	YES	0.012
Countryside	400-500 g/d	NO	0.050
Countryside	> 500  g/d	YES	0.024
Countryside	>500  g/d	NO	0.012
City	<400 g/d	YES	0.042
City	<400 g/d	NO	0.048
City	400-500 g/d	YES	0.059
City	400-500 g/d	NO	0.050
City	>500  g/d	YES	0.057
City	>500 g/d	NO	0.070