Around the world, some ethnic groups are more likely to be affected by type 2 diabetes than others. For instance, Pacific Island nations and Middle-Eastern nations have some of the highest rates of type 2 diabetes in the world. In New Zealand, there are also differences in the rate of diabetes between ethnic groups.

Diagnosed diabetes in New Zealand, by ethnic group and gender Data from New Zealand Ministry of Health (2011). Note this chart does not include undiagnosed diabetes.						
	% of adults with diagnosed diabetes			Estimated number of adults with		
	Total	Men	Women	diagnosed diabetes		
Total NZ Population	5.5	6.0	5.0	193,000		
Māori	7.3	7.9	6.8	33,000		
Pacific	10.2	10.6	9.9	21,000		
Asian	6.2	8.4	4.2	23,000		
European/other	4.7	4.9	4.5	130,000		

- 1. Which ethnic groups in New Zealand are more likely to have diabetes than the total population?
- 2. Which ethnic group showed the largest difference between men and women diagnosed with diabetes? What was the difference?
- 3. Which ethnic group showed the smallest difference between men and women diagnosed with diabetes? What was the difference?





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When comparing one ethnic group with another, we cannot just compare the percentage of people with diabetes. This is because there are different age structures in different ethnic groups within our total population.

- For instance, there are more young people in the New Zealand Pacific population than the total New Zealand population.
- Statisticians can adjust the percentage rates according to age and sex, so that differences (for example, because one population is younger than another) are removed.

Age-adjusted rate ratios for diagnosed diabetes in New Zealand Data from New Zealand Ministry of Health (2012).						
Comparisons of each ethnic group with people not in that ethnic group						
Group of interest	Comparison group	Not adjusted	Age adjusted			
Māori	Non-Māori	1.4	2.1			
Pacific	Non-Pacific	2.0	3.4			
Asian	Non-Asian	1.2	1.7			

- 4. Is the difference between the rate of diabetes for these three ethnic groups and the population not in each ethnicity larger or smaller when it is adjusted for age?
- 5. Using the information in both tables, write a summary statement about the relationship between ethnicity and rates of diagnosed diabetes in the New Zealand population.



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