



BHUTAN



FACTSHEET BHUTAN



World Health
Organization
Regional Office for South-East Asia



Non Communicable Diseases Risk Factors: STEPS Survey Bhutan 2014



67% do not consume
sufficient fruits and
vegetables



67%

27% men and
40% women
are **overweight
or obese**



27%



40%

36% have raised
BLOOD PRESSURE



36%

ONE out of **THREE**
hypertensives is not
treated for **HIGH
BLOOD PRESSURE**



ONE

THREE

Bhutanese 9 gm

WHO recommends < 5 gm

% with raised blood sugar 6.4%



9 gm

**DAILY
SALT INTAKE**



< 5 gm



6.4%

The **STEPS** survey of
**noncommunicable
disease (NCD)**
risk factors in Bhutan
was carried out from
April-June 2014. Bhutan
carried out Step 1, Step
2 and Step 3.

Socio demographic and
behavioural information
was collected in Step 1.
Physical measurements
such as height, weight
and blood pressure were
collected in Step 2.

Biochemical measure-
ments were collected to
assess salt intake, blood
glucose and cholesterol
levels in Step 3.
The survey was a
population-based survey

of adults aged 18-69.
A multi-stage stratified
cluster sampling design
was used to produce
representative data
for that age range in
Bhutan.

A total of 2822 adults
participated in the
survey. The overall
response rate was
96%.

Results for adults aged 18-69 years

Both Sexes

Males

Females

→ Step 1: Tobacco Use

Percentage who currently smoke tobacco	7.4%	10.8%	3.1%
Percentage who currently smoke tobacco daily	4.3%	6.0%	2.1%
Percentage who currently use smokeless tobacco	19.7%	26.5%	11.0%
Percentage who currently use smokeless tobacco daily	18.5%	25.2%	9.9%
Percentage who currently use tobacco in any form (smoked and/ or smokeless)	24.8%	33.6%	13.6%

For those who smoke tobacco daily

Average age started smoking (years)	18.9	19.0	***
Percentage of daily smokers smoking manufactured cigarettes	84.1%	90.1%	***

→ Step 1: Alcohol Consumption

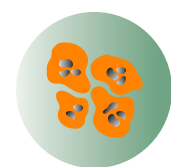
Percentage who are lifetime abstainers	39.0%	30.6%	49.8%
Percentage who are past 12 month abstainers	10.8%	12.1%	9.3%
Percentage who currently drink (drank alcohol in the past 30 days)	42.4%	50.0%	32.8%
Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days)	22.4%	29.0%	14.1%

→ Step 1: Diet

Mean number of days fruit consumed in a typical week	1.7	1.6	1.9
Mean number of servings of fruit consumed on average per day	0.7	0.7	0.8
Mean number of days vegetables consumed in a typical week	5.6	5.6	5.5
Mean number of servings of vegetables consumed on average per day	3.8	4.0	3.5
Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	66.9%	64.8%	69.6%
Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	7.8%	7.4%	8.3%
Percentage who always or often eat processed foods high in salt	11.1%	11.0%	11.2%

→ Step 1: Physical Activity

Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)*	6.4%	3.8%	9.6%
Median time spent in physical activity on average per day (minutes) (presented with inter-quartile range)	330	367.1	274.3
Percentage not engaging in vigorous activity	48.8%	35.2%	66.0%



Results for adults aged 18-69 years

Both Sexes

Males

Females

→ Step 1: Cervical Cancer Screening

- Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer

→ Step 2: Physical Measurements

- Mean body mass index - BMI (kg/m²)
- Percentage who are overweight (BMI ≥ 25 kg/m²)
- Percentage who are obese (BMI ≥ 30 kg/m²)
- Average waist circumference (cm)
- Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP
- Mean diastolic blood pressure - DBP (mmHg), including those currently on medication for raised BP
- Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)
- Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg) who are not currently on medication for raised BP

→ Step 3: Biochemical Measurement

- Mean fasting blood glucose, including those currently on medication for raised blood glucose (mg/dl)
- Percentage with impaired fasting glycaemia as defined below
 - capillary whole blood value ≥5.6 mmol/L (100 mg/dl) and <6.1 mmol/L (110 mg/dl)
- Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose
 - capillary whole blood value ≥ 6.1 mmol/L (110 mg/dl)
- Mean total blood cholesterol, including those currently on medication for raised cholesterol (mg/dl)
- Percentage with raised total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol)
- Mean intake of salt per day (in grams)
- Cardiovascular disease (CVD) risk**
- Percentage aged 40-69 years with a 10-year CVD risk ≥ 30%, or with existing CVD**

Summary of combined risk factors

- Current daily smokers
- Less than 5 servings of fruits & vegetables per day
- Insufficient physical activity
- Overweight (BMI ≥ 25 kg/m²)
- Raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)

- Percentage with none of the above risk factors
- Percentage with three or more of the above risk factors, aged 18 to 39 years
- Percentage with three or more of the above risk factors, aged 45 to 69 years
- Percentage with three or more of the above risk factors, aged 18 to 69 years

* For complete definitions of insufficient physical activity, refer to the GPAQ Analysis Guide (<http://www.who.int/chp/steps/GPAQ/en/index.html>) or to the WHO Global recommendations on physical activity for health (http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/index.html)

** A 10-year CVD risk of ≥30% is defined according to age, sex, blood pressure, smoking status (current smokers OR those who quit smoking less than 1 year before the assessment), total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose concentration >7.0 mmol/l (126 mg/dl))

*** Sample size was less than 50



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