



# Bristol stool form scale

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The normality of ones' stools is determined by comparing them to the Bristol Stool Form scale, or the BSF scale for short.

It is a self-diagnostic chart designed to help skittish\* patients discuss this delicate subject with their doctors without getting embarrassed.

Skittish\* = حَيِّيّ ؛ خَجَلٍ ؛ مُسْتَحِ



# Bristol stool chart

Type 1



Separate hard lumps,  
(like nuts) hard to pass

Type 2



Sausage-shaped  
but lumpy

Type 3



Like a sausage  
but with cracks  
on its surface

Type 4



Like a sausage  
or snake, smooth  
and soft

Type 5



Soft blobs with  
clear cut edges  
(passed easily)

Type 6



Fluffy pieces with  
ragged edges, a  
mushy stool

Type 7



Watery, no solid  
pieces. Entirely  
liquid

# THE BRISTOL STOOL CHART

1



*Separate  
hard lumps*

2



*Lumpy and  
sausage like*

## CONSTIPATION

*You need insoluble fibre...*

3



*A sausage shape  
with cracks in  
the surface*

4



*Like a smooth,  
soft sausage  
or snake*

## PERFECTION!

*Keep doin' what you're doin'!*

5



*Soft blobs with  
clear-cut edges*

6



*Mushy  
consistency with  
no solid edges*

7



*Liquid consistency  
with no solid pieces*

## INFLAMMATION

*You need soluble fibre...*

## **Type 1: Separate hard lumps, like nuts**

Typical for acute dysbacteriosis. These stools lack a normal amorphous quality, because bacteria are missing and there is nothing to retain water. The lumps are hard and abrasive, the typical diameter ranges from 1 to 2 cm (0.4–0.8”), and they’re painful to pass, because the lumps are hard and scratchy. There is a high likelihood of anorectal bleeding from mechanical laceration of the anal canal. Typical for post-antibiotic treatments and for people attempting fiber-free (low-carb) diets. Flatulence isn’t likely, because fermentation of fiber isn’t taking place.



## **Type 2: Sausage-like but lumpy**

Represents a combination of Type 1 stools impacted into a single mass and lumped together by fiber components and some bacteria. Typical for organic constipation. The diameter is 3 to 4 cm (1.2–1.6”). This type is the most destructive by far because its size is near or exceeds the maximum opening of the anal canal’s aperture (3.5 cm). It’s bound to cause extreme straining during elimination, and most likely to cause anal canal laceration, hemorrhoidal prolapse, or diverticulosis. To attain this form, the stools must be in the colon for at least several weeks instead of the normal 72 hours. Anorectal pain, hemorrhoidal disease, anal fissures, withholding or delaying of defecation, and a history of chronic constipation are the most likely causes. Minor flatulence is probable. A person experiencing these stools is most likely to suffer from irritable bowel syndrome because of continuous pressure of large stools on the intestinal walls. The possibility of obstruction of the small intestine is high, because the large intestine is filled to capacity with stools. Adding supplemental fiber to expel these stools is dangerous, because the expanded fiber has no place to go, and may cause hernia, obstruction, or perforation of the small and large intestine alike.

### **Type 3: Like a sausage but with cracks in the surface**

This form has all of the characteristics of Type 2 stools, but the transit time is faster, between one and two weeks.

Typical for latent constipation. The diameter is 2 to 3.5 cm (0.8–1.4”). Irritable bowel syndrome is likely. Flatulence is minor, because of dysbacteriosis. The fact that it hasn’t become as enlarged as Type 2 suggests that the defecations are regular. Straining is required. All of the adverse effects typical for Type 2 stools are likely for type 3, especially the rapid deterioration of hemorrhoidal disease.

## **Type 4: Like a sausage or snake, smooth and soft**

This form is normal for someone defecating once daily. The diameter is 1 to 2 cm (0.4–0.8”). The larger diameter suggests a longer transit time or a large amount of dietary fiber in the diet.



## **Type 5: Soft blobs with clear-cut edges**

I consider this form ideal. It is typical for a person who has stools twice or three times daily, after major meals. The diameter is 1 to 1.5 cm (0.4–0.6”).

## **Type 6: Fluffy pieces with ragged edges, a mushy stool**

This form is close to the margins of comfort in several respects. First, it may be difficult to control the urge, especially when you don't have immediate access to a bathroom. Second, it is a rather messy affair to manage with toilet paper alone, unless you have access to a flexible shower or bidet. Otherwise, I consider it borderline normal. These kind of stools may suggest a slightly hyperactive colon (fast motility), excess dietary potassium, or sudden dehydration or spike in blood pressure related to stress (both cause the rapid release of water and potassium from blood plasma into the intestinal cavity). It can also indicate a hypersensitive personality prone to stress, too many spices, drinking water with a high mineral content, or the use of osmotic (mineral salts) laxatives.

## **Type 7: Watery, no solid pieces**

This, of course, is diarrhea, a subject outside the scope of this chapter with just one important and notable exception—so-called paradoxical diarrhea. It's typical for people (especially young children and infirm or convalescing adults) affected by fecal impaction—a condition that follows or accompanies type 1 stools. During paradoxical diarrhea the liquid contents of the small intestine (up to 1.5–2 liters/quarts daily) have no place to go but down, because the large intestine is stuffed with impacted stools throughout its entire length. Some water gets absorbed, the rest accumulates in the rectum. The reason this type of diarrhea is called paradoxical is not because its nature isn't known or understood, but because being severely constipated and experiencing diarrhea all at once, is, indeed, a paradoxical situation. Unfortunately, it's all too common.

## Let's summarize it :

- ❖ Abnormal stools are any stools that require straining and/or you feel pressure from stools passing through the anal canal.
- ❖ Abnormal stools may be small or large size-wise, depending on fiber consumption, and frequency of defecation.
- ❖ Normal stools can be loose or slightly formed (Such as BSF type 5).
- ❖ Normal stools (between BSF type 4 and 6) aren't perfectly round.
- ❖ Normal stools for one person may be abnormal for another. The degree of normality is determined by the anatomy of the anal canal.
- ❖ Normal stools require zero effort and zero straining for elimination.
- ❖ Normal stools pass through the anal canal without any perception of pressure.



## Bowel movement diary according to the Bristol Stool Scale



Day

1

2

3

4

5

6

7

1

x

x

x

2

x

3

4

xx

5

6

x

7

xx



**Brown:** You're fine. Poop is naturally brown due to the bile produced in your liver.



**Green:** Food may be moving through your large intestine too quickly. Or you could have eaten lots of green leafy veggies, or green food colouring.



**Yellow:** Greasy, foul-smelling yellow poop indicates excess fat, which could be due to a malabsorption disorder like celiac disease.



**Black:** It could mean that you're bleeding internally due to ulcer or cancer. Some vitamins containing iron or bismuth subsalicylate could cause black poop too. Pay attention if it's sticky, and see a doc if you're worried.



**Light-coloured, white, or clay-coloured:** If it's not what you're normally seeing, it could mean a bile duct obstruction. Some meds could cause this too. See a doc.



**Blood-stained or Red:** Blood in your poop could be a symptom of cancer. Always see a doc right away if you find blood in your stool.





# Textures of poop



**Separate hard lumps, like nuts**  
You're lacking fibre and fluids.  
Drink more water and chomp  
on some fruits and veggies.



**Sausage-shaped, smooth and soft**  
Optimal poop! You're doing fine!



**Watery, no solid pieces,  
all liquid**  
You're having diarrhoea! This is probably  
caused by some sort of infection and  
diarrhoea is your body's way of cleaning  
it out. Make sure you drink lots of liquids  
to replace the liquids lost otherwise you  
might find yourself dehydrated!



**Sausage-shaped but lumpy**  
Not as serious as separate hard  
lumps, but you need to load up  
on fluids and fibre.



**Soft blobs with clear-cut edges**  
Not too bad. Pretty normal if you're  
pooping multiple times a day.



**Sausage-shaped  
but with cracks on surface**  
This is normal, but the cracks mean  
you could still up your intake of water.



**Fluffy pieces with  
ragged edges, a mushy stool**  
You're on the edge of normal. This type of  
poop is on its way to becoming diarrhoea.



**Soft and sticks to the side  
of the toilet bowl**  
Presence of too much oil, which could  
mean that your body isn't absorbing the  
fats properly. Diseases like chronic  
pancreatitis prevent your body from  
properly absorbing fat.

## **Soluble Fibre**

Fibre is the most important thing to think about when considering the health of your digestive system. There are two types of fibre, soluble and insoluble, both of which help to keep you regular. Soluble fibre attracts water, meaning that excess fluid is removed from within your digestive system. By binding things all together and slowing down the digestion process, soluble fibre will help put a stop to diarrhea and the “mushy” or “liquid” consistencies described in types 6 and 7. Foods that contain these soluble fibres are beans, pea and pulses, and also fibre-rich fruits and vegetables like cucumbers, carrots, citrus and berries.



## **Insoluble Fibre**

The other type of fibre, insoluble fibre, has, as the name suggests, the opposite effect. Because these fibres do not dissolve in water, they stay solid and help move things along, speeding up your digestion. This causes a laxative effect and is therefore helpful if you are suffering from constipation like it types 1 or 2 of the Bristol stool chart. To get insoluble fibre into your diet, focus on products made of whole grains like bran, rye, and brown rice. You can also find insoluble fibre in vegetables such as beetroots, cauliflower and courgettes. People who suffer with IBS can find digestive comfort through constipation, or diarrhea, or sometimes it can alternative from one extreme to another. In these cases, eating produce like oats, flax seeds and apples would be beneficial, as they contain both insoluble and soluble fibre.

## BRISTOL STOOL CHART



Type 1 Separate hard lumps

**SEVERE CONSTIPATION**



Type 2 Lumpy and sausage like

**MILD CONSTIPATION**



Type 3 A sausage shape with cracks in the surface

**NORMAL**



Type 4 Like a smooth, soft sausage or snake

**NORMAL**



Type 5 Soft blobs with clear-cut edges

**LACKING FIBRE**



Type 6 Mushy consistency with ragged edges

**MILD DIARRHEA**










Type 7 Liquid consistency with no solid pieces

**SEVERE DIARRHEA**

# Handy Nursing Reference Card

## Bristol Stool Chart

|        |   |  |
|--------|---|--|
| Type 1 |    | Separate hard lumps, like nuts<br>(hard to pass)   |
| Type 2 |    | Sausage-shaped but lumpy                           |
| Type 3 |    | Like a sausage but with cracks on<br>its surface   |
| Type 4 |    | Like a sausage or snake, smooth<br>and soft        |
| Type 5 |    | Soft blobs with clear-cut edges<br>(passed easily) |
| Type 6 |   | Fluffy pieces with ragged edges, a<br>mushy stool  |
| Type 7 |  | Watery, no solid pieces.<br><b>Entirely Liquid</b> |

## Handy Nursing Formulae

### Parenteral Drugs

*Solutions (IM or IV injections):*

$$\text{Amt required} = \frac{\text{Strength required}}{\text{Stock Strength}} \times \frac{\text{Stock Volume}}{1}$$

*Powders :*

Use manufacturer's directions

### Flowrate

$$\text{flowrate (mL/h)} = \frac{\text{volume liquid (mL)}}{\text{time (h)}}$$

$$\text{flowrate (drips/min)} = \frac{\text{volume liquid (drips)}}{\text{time (min)}}$$

$$\text{Flowrate(mL/h)} = \frac{\text{drug dosage ratio (mg/h)} \times \text{Vol Solution}}{\text{total amount of drug (mg)}}$$

A drip chamber delivers 20 drops/mL

Ensure all units are correct before performing  
calculation!

### Conversions

$$\begin{aligned} 1 \text{ gram} &= 1000 \text{ mg} \\ 1 \text{ mg} &= 1000 \text{ micrograms} \\ 100 \text{ micrograms} &= 0.1 \text{ mg} \\ 1 \text{ l} &= 1000 \text{ mL} \end{aligned}$$

# **The Right Pooping**



# ARE YOU POOPING WRONG?

In a 2003 study, 28 healthy people volunteered to time themselves doing their business in three alternate positions: sitting on a standard toilet, sitting on a low toilet, and squatting.



They not only recorded how long it took them, but also how much effort it took. Squatting, the study concluded, takes less time and effort.

**"Simply put, it straightens out the colon."**

*When we're standing, the colon (where waste is stored) gets pushed up against the puborectalis muscle, which keeps fecal continence until it's time to hit the bathroom.*

*Sitting down only partially relaxes that muscle. Squatting fully relaxes it, essentially straightening out the colon. That, in turn, eases the elimination pooping process.*

Unnatural Squatting

Natural Squatting



Sitting while pooping only half open the colon.

But squatting, really fully open the colon. It eases the elimination pooping process.

Sitting

versus

Squatting



To maintain continence the puborectalis muscle "chokes" the rectum

Squatting relaxes the puborectalis muscle and straightens the rectum





Measurement of belly height rather than B.M.I. in assessment of obesity