

# Transcript

## Episode 121

The Poop Episode | Using Fecal Changes to Monitor Health

### The A&P Professor Podcast

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## Introduction

Kevin Patton (00:01):

In his Bright and Early series, Dr. Seuss included these lines in The Foot Book, "Left foot, right foot, left foot, right. Feet in the morning, feet at night. Left foot, right foot, left foot, right. Wet foot, dry foot. High foot, low foot. Front feet, back feet. Red feet, black feet. Left foot, right foot. Feet, feet, feet. How many feet you meet!"

Aileen Park (00:36):

Welcome to the A&P Professor, a few minutes to focus on teaching human anatomy and physiology with a veteran educator and teaching mentor, your host, Kevin Patton.

Kevin Patton (00:50):

In this episode, I discuss poop. Really. It's the poop episode.

## Getting our 5#!+ in Order

Kevin Patton (01:08):

Before you listen to this episode, I ask you to consider your immediate environment right now. This episode is about feces, that in itself may alarm others around you who are listening in, or if there are children nearby, they're going to giggle uncontrollably all through this episode because, well, it's about poop and there will be some synonyms for feces coming up and you may be one of those folks who think such words could conjure demons or that your kids or mother-in-law or department chair would be shocked that you heard them. Now that you've had time to quickly pause this episode or switch to a lower volume or to your earbuds, I want to talk about synonyms for feces for a moment.

Kevin Patton (02:09):

First, I can confidently say that these words, these synonyms for feces, do not in fact conjure demons and that nearly everyone has at least a passing familiarity with most, if not all, of them. You won't be the one introducing them to so-called innocent ears. Using such words may at times be considered startling or unwelcome, which is exactly why at times they're the only choice of words to emphasize an important point or to communicate our attitude with, I don't know, the zeal that we need to in that moment. Even though I teach anatomy and physiology, a field in which feces does come up from time to time or sometimes a lot, I don't use vulgar synonyms, particularly vulgar synonyms for feces, much at all in my course.

Kevin Patton (03:15):

But I do sometimes, meaning precisely once. And here's why, most of my students are headed into healthcare professions. They'll be dealing with real people right where they are. And effective healthcare requires effective communication with patients. That's hard. Sometimes even, well, it feels impossible. Patients may be unwilling to be clear about their symptoms or their circumstances, or unable to be clear about their symptoms or circumstances. Sometimes they just don't speak our language so when we ask them if their stools are formed, they may give you the answer they think you want, but have no clear idea what that phrasing actually means. Terms like stool and feces just aren't in everyone's vocabularies. But some of those vulgar synonyms, yeah, they know what that means, which is kind of a shame, isn't it? I think that such words should be on all word lists for beginning readers.

Kevin Patton (04:32):

I'm in that first generation that learned to read using Dr. Seuss's books for children, which were apparently written using a beginning reader's word list. And I wish that words like stool and poop were on Dr. Seuss's list. Those are important words for kids to know so that they can communicate with their parents and care caregivers and medical professionals accurately. With my kids, I simply substituted words to make that happen. When I read The Foot Book to them, I substituted foot with poop. And what they heard was, "Left poop, right poop, left poop, right. Poop in the morning, poop at night. Left poop, right poop, left poop, right. Wet poop, dry poop. High poop, low poop. Front poop, back poop. Red poop, black poop. Left poop, right poop. Poop, poop, poop. How many poops you meet?" Yeah. So, well, anyway, that's my version or my reading of one of the Dr. Seuss books. The point I want to get to here is that maybe it's not such a bad idea that we introduce our students to the idea that they may need to communicate with their future clients using words like poop, and 5#!+, and so on, even if it's not the vocabulary we usually use in polite professional company.

Kevin Patton (06:13):

Not only do a significant number of patients not know all the science-y terms for poop and poop related concepts, they really don't know much about what poop is, how it forms, what can affect poop's formation and elimination, or much about any of the important health concepts involved. So first we have to find what terminology is clear to a patient and be okay with that, then we have to explain processes and structures in a way that's clear to patients maybe using that terminology. If we're afraid of that terminology, that informal, sometimes vulgar terminology, this will be clear to our students and in turn to their future clients and that's one of the things that shuts down effective communication. That embarrassment, that lack of easy communication, not

only shuts down effective communication, it shuts down trust too. So yes, I'm saying that 5#!+ builds trust, in its proper context. Nobody trusts out of context 5#!+.

## Zookeepers Know Their 5#!+

Kevin Patton (07:42):

If you're a regular listener to this podcast or if you know me in some other context, you probably remember that my first grown up job was as a zookeeper and animal trainer at the World Famous St. Louis Zoo. It's official name then and now is St. Louis Zoological Park but that World Famous part of the name, that appeared often in print and on signs and so forth back in the mid seventies when I started there. When I asked about it, which I did, you know me, of course I did, I asked about that, "Why does this seem semiofficial, this World Famous part?" The proof offered was, "Well, this is the zoo that Mr. Ranger was always threatening to send Yogi Bear to if he didn't stop stealing lunch baskets from the tourist." So yeah, I guess it was and still is world famous. When I first became a zookeeper, one of the things I learned was that I had to keep up the daily journal we had for every animal in every department of the zoo. Besides noting changes in eating and other behavior, I was told that it was critical to keep tabs on poop. When did each animal poop? What did the poop look like? Were there any other notable changes like, oh, a change in smell or texture or color?

Kevin Patton (09:12):

I made a joke about knowing that I was going to face a lot of scooping of poop in my new job as a zookeeper, but I never realized I was also going to have to help maintain a huge set of poop journals. Yeah, well, it turns out that's no laughing matter. It was explained to me that since the animals could not talk to us and would probably lie or otherwise miscommunicate with us anyway, if they could talk to us, that monitoring poop along with other physical signs was a pretty reliable way to monitor animal health. Over the years that I worked at the World Famous, as we sometimes called it, I found out how much more there was to this than I first imagined. That process of revelation continued after I left the zoo and worked off and on over the years as an animal trainer, propagation specialist, and wildlife rehabilitator at circuses and animal sanctuaries.

Kevin Patton (10:17):

Next time you're at an animal facility, such as a zoo, ask a keeper about how they keep track of animal poop. If you're ever at a circus with elephants, which they're few and far between these days, look around for a big whiteboard with all the elephant names listed and a set of tally marks next to each of those names, that's a poop board so that the elephant crew can keep tabs on how many poops each elephant had so far that day. Now, it's important to keep journals or poop boards, especially when you have a whole

crew of people taking care of animals. Maybe one person can keep that in their head if they're the only caregiver, but when you have a set of multiple caregivers, which we often have with animals but we also often have with human caregivers and medical professionals, it's best to write it down so that we can see it all there and look for patterns.

Kevin Patton (11:22):

And there might even be someone whose job it is to look over those journals, to make sure that there are no patterns that got missed. Maybe it was somebody's day off and they just didn't notice that this pattern that they noticed that one time had continued for another day or two. So yeah, usually the supervisor of each animal department, their job was to regularly review those poop journals. And I bet they didn't imagine that being part of their job when they were kids dreaming to be in charge of a zoo someday. But yeah, that's an important part of the job. And you know what? A lot of healthcare professionals need to do that sort of thing when they're reviewing records too.

Kevin Patton (12:06):

Now, getting back to animals, elephants poop on average about once an hour so that's about two dozen poops a day. The thing is, if you have a big gap in poops for any one elephant, then you have a potentially sick or injured elephant that you may not have otherwise picked up on. Now, it could be something healthy. It could be that, well, they were just sleeping or not very hungry for a short time. And so, yeah, there was a little bit of a gap in their pooping. But you have to investigate it to see what is it that's going on. Is it something expected or unexpected? And if you start getting four dozen or more poops a day for this other elephant over here, then that animal has a different kind of health issue.

Kevin Patton (12:54):

There's other practical issues besides healthcare. When I was the trainer for a young elephant named Flora, I found out that her healthy poop rate was about once every 45 minutes. That meant that I could reliably expect when the next poop was coming and scoop it out of the way before it got knocked around or stepped in or whatever or just start smelling up the place really bad. And if she hadn't pooped in the last 20 or 30 minutes before her performance, then I knew that I had to get her to poop early or her first trick when she hit the circus ring was going to be pooping and that's not what the folks in those high priced box seats closest to the ring are paying extra for, being close to the pooping trick. They don't want any pooping tricks, do they?

Kevin Patton (13:50):

Now, you may wonder, "How does one get an elephant to poop on command?" Turns out it's not that hard to do. Most performing elephants are trained to stand up on their hind legs on command. It's a natural behavior that they do in the wild when they play, when they have sex, when they spar with each other and, well, all kinds of other contexts. So it's not that hard to train. You just reward them for doing it when they do it. There's a little bit more to it than that, but not much more. It's like training a dog to sit. Dogs already sit just in their normal life on their own, using their own free will, dogs sit sometimes and all you need to do as a pet owner is just link that sitting to a signal and eventually they'll learn that when they get the signal, they're expected to do that natural behavior of sitting. So same thing with a hind leg lift or a standup trick in an elephant.

Kevin Patton (14:53):

So you get an elephant who's almost ready to poop, meaning that there's something in or near the rectum already, have them stand up once, and usually once is all it takes but maybe twice or even three times, and they'll poop. If you talk to them about it each time, tell them that you want them to poop, eventually you may not need to even have them stand up. They'll just poop on command. When they don't, you always have the standup routine ready as a backup. And if that doesn't work, well, walk them around a little bit and have a friendly chat and ask them to stand up again maybe if they still haven't pooped. Now, elephants in my experience are really smart. And I really think those chats, asking them, begging them to please poop, I think those actually really work. But I'm going to set that aside for now, because that's not really the focus of this discussion.

Kevin Patton (15:49):

I've known elephant trainers in zoos and circuses that have a regular vocal routine that they do. It sounds kind of like a chant or an auctioneer's sing-song pattern, at least most of them sound like that. Each elephant trainer or elephant keeper has their own way of doing it usually. And what they do is they use that chant to get their herd to all poop at once. They usually do this right before the elephants go into their performance or before they're loaded up to go into their trucks for a road trip. It's amazing to watch this process and listen to it. I do this kind of thing with my two dogs when I take them out on a leash to do their morning poop. I wonder if my little chant wakes up my neighbors. I never thought about that. I'm not very loud when I do that. I don't think I'm loud. I don't know. I'm going to have to check that. Anyway, even if they do hear it, I'm sure my neighbors get a kick out of it. Yeah, this is partly why I'm afraid to log into that Nextdoor app where all the neighbors complain about each other's behavior. Yeah, I don't think I'm going to do that anytime soon.

Kevin Patton (17:01):

Now, when I worked with big cats, these same concepts carry over. It's even more important that a lion or tiger poop before they go into their performance. If they poop on their assigned pedestal, which cats know by the name seat or place, well, that could cause trouble. Those seats are just big enough for a lion butt, any bigger and the lion will lay down and go to sleep, which does not make for a dynamic and dazzling performance, I can assure you. But if they poop then, well, you know how clean cats are. They're not going to sit on their assigned pedestal. It's not clean, but it's not easy to quickly get behind a momentarily discombobulated lion to clean things up. I've had these situations happen and they all worked out pretty much okay. But it's a potentially dangerous thing for the cats and for the trainers.

Kevin Patton (18:10):

Big cats usually poop once a day so that's very different than elephants, but you can probably figure out why that is. It's based on the kind of food they eat and their feeding patterns. And that's something that might be interesting to discuss with students because the type of food that we eat as humans and our feeding patterns can affect our frequency of pooping and other characteristics of that whole defecation process. So big cats usually poop once a day, first thing in the morning usually. Because all the big cats I know in captivity, and even those out in the wild, they have their big meal at night. In captivity, it's kind of an end of day reward for their workday. And because that's usually when they eat anyway, it'll get their bowels moving so that the previous day's meal will be all ready to poop out in the morning.

Kevin Patton (19:11):

Whenever I arrived to my lion or tiger dens in the morning, they'd all wake up and start stretching and rubbing their faces on the front of the den, making Chewbacca sounds, and trying to get me to rub them and scratch their ears. And all that movement usually triggered each one to poop, which I could quickly scoop up first thing in the morning and clean out their dens for the whole day. If a lion or tiger did not poop right away, well, we'd have them stretch up on their hind legs up against the wall of the den, which was already part of that morning play routine, so we'd do that until they pooped. Sometimes we'd bring somebody else's poop over, and what I mean by that is some other lion or tiger's poop, we'd bring that over, maybe in a shovel, so that the poop-less lion could sniff it and that would often do the trick and get them to defecate right then. If that didn't work, we'd run them into the practice arena and have them do sit ups. That nearly always worked, but we hardly ever had to go that far. And if that didn't work, we still had backups. We could just wait a little bit and try it again.

Kevin Patton (20:33):

I tell this story to my students and I ask them why sitting or standing up would help an animal poo and talk about the role of abdominal pressure and I'd ask my students what

could happen if their pooping pattern was disrupted. And then I'd say, "Okay, you're probably going to work with people, not zoo animals, but could this work with people too?" Sure, a person may be helped to have a bowel movement by getting up out of a chair once or twice or three times. Maybe it's not a good idea to sing a poop song to them like elephant trainers do, but the abdominal pressure concept could work, at least in some cases. What also works with people is keeping note of their poop when you're taking care of them. I wouldn't keep note of a stranger's poop or something like that. Not only people that we give care to in our professions or in our family, but you know what? Our own poop should be monitored for our own health monitoring too.

Kevin Patton (21:44):

Now, I'm going to come back to poop monitoring in a few minutes. But first I want to call attention to the fact that I knew that Flora the elephant pooped about every 45 minutes, not the elephant average of once an hour. That's important. Poop monitoring works best as a health maintenance strategy only when we know the unique baseline for each individual. That's the only way we'll know when the pattern becomes disrupted and that we need to check things out more carefully. Now, keep in mind that many human patients are unable to communicate effectively with their caregivers about their history and their current symptoms. As I mentioned earlier, maybe our human clients are nonverbal, maybe they use a different language, maybe they aren't giving us the whole story, maybe they're not being truthful for a variety of reasons, maybe they're confused by our use of medical terminology but, well, they make up an answer anyway, maybe they're too ill to remember accurately or communicate clearly, maybe we simply don't wait long enough for the answer to our questions. We do that as teachers a lot, I think. There are many diverse factors involved in patient miscommunication.

Kevin Patton (23:06):

I'll be back with more poop stories in a moment. I.

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Kevin Patton (23:13):

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## No-Poop July

Kevin Patton (24:18):

One of my most recent adventures these days is to try and figure out TikTok. I'm nowhere close to understanding it, it baffles me in so many ways. One of which is the recent TikTok phenomenon of no poop July. Apparently TikTok thrives on challenges. You do some stupid behavior on video, maybe with some music associated with it, and it seems like the stupider it is, the better, and then you challenge other people to do their version of that stupid thing. A recent challenge is to refrain from pooping for the entire month of July. Yeah, this is supposed to be a joke, not a real challenge. Well, it can't be real because, well, no human can refrain from pooping for a month, at least not under healthy circumstances. I used to care for a sloth that occasionally didn't poop for a month at a time, but usually she pooped about once a week. But healthy humans cannot do that and should not try to do that. They should not try to refrain from pooping for anything close to a month.

Kevin Patton (25:43):

Now, I'm concerned about this challenge because even though it's intended to be a joke, there's some people who will try to do it anyway. And we all know that about our species, don't we? And the thing is we can alter our pooping frequency. One way to do that is to modify our diet in ways that affect frequency of defecation. For example, changing the kinds and amounts of fiber in our diet and our frequency of meals. But think about how the defecation reflex works. To oversimplify, our rectum receives a load of feces and the internal anal sphincter muscles involuntarily relax so that the rectum can empty in the process we call defecation or elimination or 5#!+ting. The thing is if that's all that happens, then that would not work too well in a face to face A&P class. If a load of crap is involuntarily eliminated whenever it happens to reach the rectum, then, yikes, what a mess we'll have during our class. First, this one over here, and then that one over there, and as soon as the second or third one smells the first or second one and their poop, then that's going to trigger that defecation process, just like I mentioned it does with wild animals.

Kevin Patton (27:13):

Thankfully, the voluntary external anal sphincters reflexively contract when the internal sphincters relax in those first moments where we could be pooping at any moment, when the rectum is full, it gets stretched out, there's distention. Because the external anal sphincters are voluntary, we can wait to unload that feces until we reach a socially acceptable time and place to empty our rectum. Then, and only then, do we relax the external sphincters and compress our abdominal muscles to enhance the pressure

gradient for feces to move out of the body and into a toilet, we hope, and not onto our classroom seat or classroom floor. When we have a load of feces ready to leave, our brain experiences an urge to defecate so we know that we need to start looking for that socially acceptable time and place to eliminate the feces.

Kevin Patton (28:19):

We can suppress the process until we're ready. But what if it's an, oh, I don't know, a three hour evening lecture and our A&P professor doesn't allow bathroom breaks? What happens then? Well, for many people, that urge to defecate subsides and we temporarily forget about it. We're not aware of it. It's not pushing itself into our conscious awareness. It might nudge us again later in that three hour class and then fade away again and maybe nudge just once or twice more. But eventually we get out of that class and head for the restroom and all ends well. But for some folks, if they do this a lot and for even longer periods, that urge may not come back until a new load of feces starts pushing on that first load. Now, the cycle of urging to defecate starts over. And if we start ignoring that one, well, it could, over time, train our reflexes to be less sensitive and what that can do is put us in a position of being more prone to constipation, where the feces stay too long in our rectum and sigmoid colon, and more water is absorbed and they get harder and therefore it makes it even more difficult to defecate.

Kevin Patton (29:49):

Now, this sort of cycle or disruption of a cycle happens commonly in kids. They're out playing or inside playing for that matter and they have to poop, but they don't want to have to stop playing so they resist the urge and it goes away and comes back later and goes away again and over time that can cause the feces to get hard because of all that water being reabsorbed and it just sits there in the rectum and sigmoid colon, as I just mentioned. For caregivers of children and people taking care of the infirm, the elderly, and others who may need guidance or assistance with bathroom chores and bathroom behaviors, this is important to remember. Yeah, that older person you care for may able to hold their poop for a while but if we make a habit of urging them to hold it, of telling them to hold it for a while, that could become a chronic constipation problem. So you know what? I'm not going to support no-poop July on TikTok.

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Kevin Patton (30:58):

It costs money to syndicate this podcast in all the channels, and websites, and podcast players, and book readers, and music players, and, well, all the bazillion places you can listen to or read this podcast. That funding comes from the Master of Science in Human Anatomy and Physiology Instruction, the HAPI degree. I have frequently mentioned that

I'm on the faculty of this program at Northeast College of Health Sciences. And we recently graduated our most recent cohort who have all worked with evidence based teaching strategies that they have learned to apply in their review of all the major topics in the typical anatomy and physiology course. Check out this online graduate program at [northeastcollege.edu/hapi](http://northeastcollege.edu/hapi), that's H-A-P-I, or click the link in the show notes or episode page. A new cohort is forming right now.

## Poop Reading

Kevin Patton (32:07):

In an earlier segment, I mentioned that the key skill for a talented and effective zookeeper or animal caregiver is not the ability to scoop poop. Pretty much anybody can do that. The essential skill really is poop reading. That is the ability to monitor poop, knowing what to look for and knowing what the different possible changes in poop could mean. We've already talked a bit about frequency. We know that there are various factors we could investigate if motility rate increases and we observe diarrhea, which literally means flow through.

Kevin Patton (32:47):

Word dissection.

Kevin Patton (32:51):

Whoa, wait, wait, where did that come from? I guess my recording software has now become sentient. Oh, it's true. The rumors are true. Well, yeah, word dissection is when we do what we always do when we're teaching anatomy and physiology and take some new terms that are important to understand and break them down into their word parts. So let's do that again. We know that there are various factors we could investigate if motility rate increases and we observe diarrhea, which literally means flow through. We could check for changes in the diet, for possible infections or even stress. Likewise, for atypically reduced motility that can produce constipation. But another important part of poop reading is when we see changes in the amount, texture, color, smell, and other characteristics.

Kevin Patton (33:55):

I usually take a few minutes with my A&P students to go through some of these when we're talking about defecation in the digestion module of the course. I do this partly because I think poop reading is important for everyone. And yes, you can quote me on that. Poop reading is important for everyone. Maybe I need a tee-shirt or a poster or

something. But poop reading is especially important for professional caregivers, such as patient care technicians, nurses, physicians, and therapists. Another reason I do this is because, well, it helps students integrate what they know. It helps them take concepts not directly related to the process of elimination and apply them in a different context. That sort of thing deepens their understanding, but it also gives them the experience in problem solving that will help them in their professions.

Kevin Patton (34:54):

So here's some examples that I usually bring up in class, depending on how much time we have. One is what if you notice that your feces has turned gray? Now, normally feces is some shade of brown, that's healthy feces. So I guess the first question that I need to ask my students is, "Why is it brown?" We don't just eat brown food and no matter what color food we eat, most of the time, it still turns out brown. Now, there are some foods that can end up in the feces and can discolor the feces and we'll get to that in a moment, but normally it's brown. So what does that? Well, the answer it turns out is bile. That the bile pigments, they color the feces in a way that makes them look brown. And if our bile production is blocked or reduced or nonexistent, then our feces aren't going to be turning brown. And depending on what we're eating, it's probably going to be gray. So gray feces can indicate a reduced amount of bile or maybe even a total lack of bile.

Kevin Patton (36:10):

So then the next question is, so now what are we going to look at in that patient? Where are we going to go to see what's going on? What can cause reduced bile? So we can talk about bile duct blockages, we can talk about all those different things that can affect the amount of bile that ends up in the intestinal tract. Another question might be, "Okay, your feces aren't brown, they're black, they have turned distinctly black. Now, what does that tell us?" Well, if we ate something that is known to turn the feces black, then I guess that might have something to do with it and maybe it isn't really black-black. Maybe it's just darker brown than usual. So we have to make those determinations and we can talk about the different possibilities that can produce that kind of effect. But what if they're really, really black? Then what could that mean? Well, one thing it could mean is that there's been some bleeding, especially high up in the digestive tract.

Kevin Patton (37:13):

Now, why wouldn't it be red if there was bleeding? Well, if there is red in the stool that could signal bleeding also, but probably bleeding lower down in the digestive tract. So what's the difference? Well, when you have blood that enters the digestive tract in the very early stages of processing in the intestines, then it's going to begin to clot and it's going to begin to turn very dark brown and then black. And depending on how much blood is there, the feces could get very black. So what that means is there's blood there

and it's been in the digestive track long enough for it to turn very black. If we see red there, then that means it hasn't been in the digestive tract long enough for it to form this clotting process and form that black color associated with clotting so this is going to bring us back to our earlier discussions in the course about blood and its color and factors that affect its color. And then we can think about, "Okay, what kind of situations would cause bleeding up high in the digestive tract? What kind of situations would cause bleeding lower down in the digestive tract? Could we have a mix of red and black in the feces? And if we did, then what might that indicate? What are the possibilities there?"

Kevin Patton (38:43):

Something else that we can think about in terms of the feces is, "What if it smells really weird?" Now, sometimes that indicates something that we've eaten and it's normal and expected. Some things that have a distinctive and strong odor like onions or garlic or something like that can show up in the feces and that might actually be very helpful because it's going to help us understand what that patient has been eating. And we could even ask them, "When were you eating those onions?" And that can give us some timing to see, well, how fast is the motility of that person's digestive tract? That might tell us something. Was it two hours ago or was it a day and a half ago? Another thing that we might smell in the feces is the distinctive odor of certain medical conditions, especially bacterial infections. There are certain infections of the intestine that produce characteristic odors and so that might be a hint to someone who has had the experience of that, that is has been around people with those particular infections. It might give them a hint and say, "You know what? This could be this bacterial infection or that infection," or something like that.

Kevin Patton (40:13):

Another thing that we might see in the feces are little things moving around independently, that is they're alive, they're alive. And we know that they're all kinds of things that are alive in the feces because we have that microbiome and the feces are very rich in various kinds of organisms, including animals, very small animals, but usually we don't see them at least in normal, healthy feces. But if we see a ton of worms, for example, well, the type of worm it is could be useful to us. It'll tell us, "Look, this person has a parasite infestation." And maybe we could take a sample of some of those worms, take a fecal sample and examine it and see, "Well, what kind of worms are they? Are there any other kind of worms? Any other kind of parasites? Any other kinds of issues in that feces?"

Kevin Patton (41:10):

We might also notice that there's some object there that shouldn't have been swallowed, but was swallowed and made it all the way through the digestive tract, now is part of the feces. So if we have a young child or maybe even an older person or something,

who's always showing up with marbles in their feces, that might be a good indication that they have this very dangerous habit of swallowing marbles or whatever else it is. So that's another thing that we can look at. Maybe it will be a clue as to someone having eaten something inappropriate. There's a long list of different kinds of things that we may notice and all of those things, they have an answer to them. I think it's a fun and enlightening and useful activity to do as part of an interactive discussion to get students to solve those poop mysteries.

## **Sponsored by HAPS**

Kevin Patton (42:12):

Marketing support for this podcast is provided by HAPS, the Human Anatomy and Physiology Society, which you can check out online at [theAPprofessor.org/HAPS](http://theAPprofessor.org/HAPS), that's H-A-P-S. I just finished the summer offering of the HAPS book club, and I'm looking forward to the upcoming fall series. We meet on Zoom every few weeks to discuss different parts of the book chosen for that series. Coming up for fall is the book *What Inclusive Instructors Do: Principles and Practices for Excellence in College Teaching*. You know what? I can't wait for that.

## **We All Need to Know our 5#!+**

Kevin Patton (42:58):

When I tell these stories and take my students through some poop reading scenarios, solve some poop mysteries, I try to time it all so that just as the class is scheduled to end, I can say with a flourish in my dramatic storytelling voice, "And so now we can see that zookeepers and health professionals alike really need to know their 5#!+." The mic drops. That's it. End of class. But you know what? You do you. One of the reasons this kind of ending works well for me is that I don't typically use the word 5#!+ in my everyday conversation. I generally use it sparingly and only in its literal meaning of feces. So it's unexpected when I use that term this one time in the last part of my second trimester with a group of A&P students who've gotten to know me pretty well, and I've gotten to know them pretty well. But you know what? I want to revisit the use of that term.

Kevin Patton (44:08):

Some of you will have no problem in using vulgar synonyms in your teaching, but others of you will shy away. We're all different and that's okay. However, I think it's important for us to recognize that words like 5#!+ are taboo for some people because things related to defecation and urination and sex and some other natural behaviors are often

private and so terms or discussions about them can be considered taboo. Okay, that's important to remember when making choices about how to communicate with our students and with our peers and with clinical clients.

Kevin Patton (44:52):

But the flip side of that coin has equal value in my opinion. That is because a term is vulgar, which originally and literally refers to anything related to the common people, doesn't that imply that it's something that we can use to communicate with those who may not have had the same experiences or high level education that professionals have had? I think I want to communicate with both the vulgar and the high society folks in my course. And I want all of my students to be able to communicate comfortably and accurately with their potential patients and other clients. So maybe being comfortable with either the upper-crust Latin based term or the vulgar old English-Germanic term used by ordinary people is a good thing. I'll just leave you with this one last thought, if I'm ever in a meeting or having a cup of tea with you and I suddenly suggest that you stand up and stretch and take a short walk with me, it could very well be that, as with an elephant, I think you're full of 5#!+ and we need to clear that out right away before it suddenly comes out on its own and makes everyone around us uncomfortable.

## Staying Connected

Kevin Patton (46:24):

You've just listened to the poop episode, episode 121. It was a real 5#!+ show, I know, but I hope you found something you can take with you into your A&P course, or perhaps you found something you can pick up and bag and deposit it in a trash receptacle with a tight lid. I used stories from my days working with wild animals to talk about the frequency of defecation, including how to get an elephant to poop on command and on how to read poop in both animals and humans. And I chatted a bit about the taboo of using vulgar terms for defecation. I bet you have some stories to tell or analogies to share that are more closely linked to you and your life story or you can always just tell stories about your goofy friend, Kevin, if you want to do that. If you don't see links in your podcast player, go to the show notes at the episode page at [theAPprofessor.org/121](http://theAPprofessor.org/121), where you can also claim your digital credential for listening to this episode. Really how many of your colleagues can say that they have a poop credential? Well, now you can. I'll see you down the road.

Aileen Park (47:54):

The A&P Professor is hosted by Dr. Kevin Patton, an award-winning professor and textbook author in human anatomy and physiology.

Kevin Patton (48:07):

This product is freshest if eaten before the date on the carton.