

Traa shoh ta shin ooilley er chlashtyn jeh ny yogurtn shen ta cummal seose ny beishteigyn mie as vondeishagh ta goaill ayns mynnagh dy chooilley unnane jin. Agh row fys eu nagh vel agh 43% jeh ny killagyn ayns nyn gorp killagyn dooinney as dy re myn-vioee jeh caghlaaghyn sorçh ta'n chooid elley? Ta ny myn-chretooryn shoh ry gheddyn ayns dy chooilley chooill çheu-sthie as er eaghtyr y chorp ain, agh er-lheh ayns y vynnagh, raad t'ad er-lheh scanshoil son y claynt. Ta mysh feed thousane dy yientagyn ayns killagyn dooinney, agh my ta shin cur dy cheilley ooilley ny gientagyn ayns ny myn-vioee çheu-sthie jin, ta eddyr daa villioon as feed millioon gientagyn myn-vioee ayns yn 'nah genome' ain.

Ta ronseyderyn goaill toshiaght dy hoiggal ny smoo mychione y vyn-chruinney-vio (*microbiome*) shoh. Roish nish cha row shin dellal rish ny myn-vioee ayns nyn gallin agh dy hilgey medjiny orroo dy chur mow ad tra t'ad jannoo çhing jin. Agh nish t'eh smooinit dy voddagh ny beishteigyn hene shirveish son medjin noi ymmodee gorlaghyn (*bugs as drugs* t'ad gra rish shoh). T'eh er ve jeeaghit dy vod cur er ash myn-vioee va dy laccal ayns mynnagh lugh cur er lugh roauyr trimmid y choayl, as ta feanish ayn dy vod karraghey myn-chruinney-vio peiagh feaysley er farbaghey-collane askaidagh. She cooish ymmodee-filley t'ayn: t'eh smooinit dy voddagh feme y ve rish mestaghyn er-lheh jeh mysh jeh gys queig myn-vioee jeig ayns lheihs.

Ta paart dy leih goll hoshiaght roish ny sheanseyrn as jannoo reddy orroo hene nagh vel er nyn browal dy ve breeoil ny sauçhey. Son mac-soyley, t'eh smooinit dy vel lhiannoo çheet quail myn-vioee son y chield cheayrt choud's t'eh goll er ruggey (t'eh slane glen 'sy vreinn) as dy re ny myn-vioee t'eh dy gheddyn veih corp e voir ayns ny chield vinnidyn shen feer scanshoil ayns cummey myn-chruinney-vio yn lhiannoo as soiaghey seose yn system hene-choadey vees farraghtyn ooilley laghyn e heihll. She myn-vioee jeh sorçhyn elley hig raad lhiannoo ta giarit ass y voir ayns ynnyd v'er ny ruggey dy dooghyssagh, as ta paart smooinaghtyn dy vod bree y ve ec shoh er slaynt yn lhiannoo 'sy traa ry heet. Ta'n Scrutaghey Cruinney-vio Oikanyn ayns Ollooscoill Virmingham çhymaghey keck veih kiare feed thousane lhiannoo dy gheddyn magh vel shih firrinagh.

Ta paart dy vummigyn ta geddyn Caesarean goaill ass laue vondeishyn ny myn-vioee oc hene y choyrt da nyn lhiannoo liorish slaa stoo ass nyn bytt hene er crackan as beal y lhiannoo. Cha s'ain my-ta vel yn 'sheelaghey pytt' shoh gobbraghey ny vel eh danjeyragh. Aght erbee, t'eh jeeaghyn baghtal dy vel lheihsyn ta jannoo ymmyd jeh myn-vioee goll dy chaghlaa dy mooar yn aght ta shin prowal son çhingys as slaanaghey eh.

By now we have all heard of those yogurts which boost the good bacteria that live in the guts of every one of us. But did you know that only 43% of the cells in our bodies are human and that the rest are micro-organisms of various kinds? These microbes are found in every nook and cranny both inside and on the surface of our bodies, but especially in the intestines, where they are especially important for health. There are about twenty thousand genes in the human genome, but if we add all the genes in our microbiome together, there are between two and twenty million genes in our ‘second genome’.

Researchers are beginning to understand more about this microbiome. Hitherto we have mainly interacted with the microbes in our bodies by throwing drugs at them to kill them when they make us ill. But now it is thought that the microbes themselves could act as medicine for many conditions (‘bugs as drugs’). It has been shown that restoring missing intestinal microbes can cause an obese mouse to lose weight, and there is evidence that repairing a person’s microbiome can relieve ulcerative colitis. This is a complex matter: it is thought that defined cocktails of between ten and fifteen different microbes will be needed in a treatment.

Some people are getting ahead of the scientists and taking matters into their own hands ways which have not been proven to be effective or safe. For example, a baby encounters microbes for the first time while it is being born (it is sterile in the womb) and it thought that the micro-organisms it gets from the mother’s body in these first moments are crucial in forming the child’s microbiome and setting up the immune system for the rest of its life. A child born by Caesarean section encounters different kinds of microbes, and it is thought this may effect the child’s long-term health. The Baby Biome Study at the University of Birmingham is gathering faeces from 80,000 babies to find out if this is true.

Some mothers who have Caesareans are attempting to give their babies the benefits of their own microbes by smearing fluids from the vagina on the child’s skin and mouth. It is not yet known whether this ‘vaginal seeding’ works or whether it is dangerous. In any case, it seems clear that microbial medicine is set to revolutionize how we test for and treat disease.

