

Kvindebolden

ENGLISH BELOW

Ligestilling. Granvoksne mænd og spinkle teenagepiger spiller med den samme tunge fodbold. Hvorfor? Kan man mindske epidemien af knæ- og hovedskader ved at gøre bolden bare en smule mindre?

Gunver Lystbæk Vestergård, Weekendavisen, 18. august, 2022

»Spille retur, bum, derover, spille retur, førstegangsberøringer, kom!« U16-pigerne i Frederiksberg-klubben FA 2000 bliver instrueret i en pasningsøvelse af deres træner, Frederik Nørgaard. De har øjne på bolden. Sidestep og så et let indersidespark tilbage til makkeren.

Nørgaard presser dem: »Spil en anelse hurtigere, end I kan følge med til.«

Efter ti minutter sender han dem rundt om kunstgræsbanen driblende med bolden, skiftevis luntende og spurtende.

»Vi falder om, hvis vi skal tage to omgange mere!« råber en af pigerne.



Illustration: Matilde Digmann

»Nej, I gør da ej ... Okay, vi tager en vandpause,« svarer Nørgaard.

En almindelig træningsaften for et ambitiøst førstepigehold – og så alligevel ikke. Ved U16 skifter pigerne fra en størrelse fire-fodbold (63,5-66 centimeter i omkreds og 350-390 gram) til en størrelse fem (68-70 centimeter og 410-450 gram). »Femmeren« er standardfodbolden i hele verden og har været det siden 1872, uden at nogen før eller efter har tænkt store tanker om det. I andre boldsport som håndbold og basket har man ellers forskellige størrelser bolde til mænd og kvinder.

Så Nørgaards U16-piger skulle egentlig spille med den samme bold som fuldvoksne mænd i en skostørrelse 46. Selv lille kortbenede Messi spiller i en størrelse 42, og i snit er en kvindefod ti procent mindre end en herrefod.

Men det gør pigerne ikke. I stedet indkøbte Nørgaard sidste år 100 bolde, der er specialudviklet til kvinder. De er 67 centimeter i omkreds, og vægten er 368 gram – altså en størrelse 4,5.

»Hvorfor skal de ikke have en ordentlig bold?« siger Nørgaard med en umiskendelig aarhusiansk dialekt. »De får så mange skader, de piger. Min egen datter på holdet har fået schlatterknæ (særligt ømme og betændte knæ, *red.*). Med den her bold kan de ovenikøbet lave rigtige hjørnespark og hurtigere pasninger.«

Pigefodboldspillere er nogle af de mest skadede idrætsfolk. Deres risiko for korsbåndsskader og overbelastningsskader er flere gange højere end drengenes. Skyldes nogle af dem mon den store herrebold?

Nørgaard har ikke haft en eneste alvorlig knæskade på sit hold, siden han begyndte at spille med kvindebolden, og det er usædvanligt.

16-årige Amalie Mikkelsen nåede at spille to år med femmeren, før hun skiftede til FA 2000.

»Jeg har haft holdkammerater, der ikke kom tilbage efter en knæskade. Jeg tror ikke, de var fysisk klar til at spille med så tung en bold.«

Den mindre bold, synes hun til gengæld er skøn:

»Der skal ikke så meget kraft til for at placere den i målet, og den er mindre ved fødderne, så jeg behøver ikke bruge så store benbevægelser i finterne.«

Også 15-årige Anabita Attaran kan mærke en forskel.

»Jeg har meget mere ømme knæ, når vi har spillet en kamp med femmeren,« siger hun.

Bag kvindebolden, også kaldet Eir-bolden, står ildsjælen Majken Gilmartin, der blev frustreret over at se pige efter pige, karriere efter karriere, knæ efter knæ blive smadret. Selv havde hun ingen menisk tilbage som 16-årig.

»Ingen børn skal opereres på grund af sport. Ret tidligt tænkte jeg, at der altså er noget med den boldstørrelse. Det var pudsigt, at alle skaderne kom, når vi skiftede til femmeren. Så gennem det

engelske fodboldforbund fandt jeg frem til en fabrik i Pakistan, som kunne producere en mindre bold, og så lavede vi den simpelthen.»

Hun udviklede bolden sammen med kolleger i klubben B93 og nogle af Danmarks dygtigste idrætsforskere, som også testede den. En rundspørge blandt Tysklands U17-spillere viste, at 66 procent syntes, den var sjovere at spille med. DBU gav en dispensation til at bruge den, og Gilmartin kom blandt andet i The New York Times, men så ebbede det hele ud. I toppen af fodboldverdenen var interessen der simpelthen ikke.

Nu er tiderne dog ved at skifte. Mere og mere taler man om, at kvindefodbold er sin egen sport, som ikke skal lide under mændenes doktriner.

DEN FYSISKE FORSKEL på mænd og kvinder påvirker fodboldspillet. Det viste docent ved Norges teknisk-naturvidenskabelige universitet Arve Vorland Pedersen og to kolleger senest i en [oversigtsartikel fra 2019](#). Det mest overraskende fund var, at mænd ikke behøver at være supermænd for at spille fodbold på højt plan, men det gør kvinderne. Spillet kræver, at de er i fysisk bedre form end herrespillerne, relativt set i forhold til den gennemsnitlige mand og kvinde. Noget af det er boldens skyld.

»Hver pasning koster lidt mere energi end for mændene. Så kvinderne bliver hurtigere trætte. De skal løbe længere i forhold til deres kapacitet, og de laver flere afleveringer,« siger Vorland Pedersen.

Skal kvinderne lave en aflevering over 20 meter, vil de hyppigere løfte den op i luften end mændene, fordi det vil kræve for meget energi at trille den langs jorden.

»Afleveringen bliver mere et skud end en pasning. Kvinderne bruger mere vristen, og derved mister de træfsikkerhed,« siger Vorland Pedersen, der selv har trænet piger og altid valgte de letteste femmerbolde til dem. »At kvinderne spiller med en femmer, svarer næsten til, at mændene skulle spille med en basketball.«

Hans studie viser også, at forskellen i skudhastighed mellem mænd og kvinder er meget mindre end forskellen i benstyrke. Kvinderne kompenserer altså for den manglende styrke ved at udvikle en bedre teknik.

Ingen, der så EM-finalen mellem England og Tyskland for nylig, kan mene, at bolden dér var for stor. Sjældent har en fodboldkamp – uanset køn – været så fortryllende, og de 87.000 tilskuere på Wembley i alle aldre og køn gjorde den engelske sommerluft elektrisk. Men hvad med alle de breddespillere, som ikke skal være europamestre? På et seniorkvindehold i de laveste rækker kan knap en håndfuld lave et højt hjørnespark eller målspark, og de diagonale sideskift er ønsketænkning. En professionel ungdomstræner fortæller også, at han er nødt til at træne halvliggende vristspark, to år før både pigerne og drengene skifter til femmeren, fordi bolden ikke kan flyve uden en sublim teknik.

ÉN TING ER seværdige hjørnespark. Straks mere alvorligt er skaderne. Teenagepigefodboldspillere har omkring fire gange større risiko for korsbåndsskader end jævnaldrende drengespillere, fortæller Jesper Bencke, leder af Bevægelseslaboratoriet på Hvidovre Hospital.

Korsbånd er de to elastikker inde i knæet, der er med til at stabilisere det. Det kan give et smæld, når et af dem ryger, og erfarne fodboldfolk gyser, når de ser en spiller kollapse og knuge knæet i smerte.

»Det er de der eksplosive retningsskift, som er farlige,« forklarer Bencke. »Knæet kommer ud til siden, og den skæve belastning stresser korsbåndet. Beskyttelsen er først og fremmest godt aktiverede baglårsmuskler.«

Pigernes problem er, at de i puberteten øger fedtmængden, mens drengene får større muskler. Derfor bliver pigerne ikke nær så stærke i baglåret i forhold til kropsvægt og kan ikke beskytte knæet lige så godt som drengene, lyder i hvert fald en af hypoteserne.

Det interessante er, at korsbåndsskaderne er hyppigst hos de 16-årige, som jo netop er skiftet til en størrelse fem.

»Men korsbåndsskaderne sker ikke, når man har bolden,« anfører Bencke. »De ses ofte hos forsvarsspillere, fordi de trækker ud til siden for at prikke til bolden, når modstanderen forsøger at dribble forbi.«

De mest udsatte for korsbåndsskader er i øvrigt kvindelige håndboldspillere.

»Til gengæld kan jeg forestille mig diverse overbelastningsskader som fiberskader i forlår og lysken som følge af en for tung bold,« tilføjer han dog.

Om Eir-bolden giver færre skader, er blevet testet af Benckes samarbejdspartner og ditto korsbåndsspecialist Mette Kreutzfeldt Zebis fra Københavns Professionshøjskole. I 2017 stod hun i spidsen for et [studie](#), der viste, at der var 22 procent flere skader blandt spillere, som brugte en femmerbold. Resultatet var dog ikke statistisk signifikant.

I Majken Gilmartins klub B93 spillede et hold piger med bolden i fire år i stedet for femmeren. Holdet havde én alvorlig skade i perioden.

»Det er katastrofalt, hvad du ser andre steder. Seks piger på ét hold kan være alvorligt skadet i én sæson,« siger Gilmartin.

Resultaterne af to andre forsøg med kvindebolden blev publiceret i [2012](#) og [2016](#). Et med U18-spillere over ti kampe og et andet med voksne elitespillere over to kampe. Laboratorieforsøg havde vist, at kvinderne kunne sparke fire-otte procent hårdere med den lettere bold, men i kampene var der stort set ingen forskelle. Altså på nær, at spillerne selv rapporterede om mindre muskelømheden, når de spillede med den mindre bold, foruden at de kunne løbe med høj hastighed i længere tid.

»Men ingen af studierne er store nok til at konkludere noget endegyldigt,« siger lektor i idræt ved Aarhus Universitet Thomas Bull Andersen, der var med til at udregne størrelsen på kvindebolden og er medforfatter på studierne. »Tit ser man faktisk en præstationsnedgang i starten, når man ændrer noget i spillet, så der er brug for mere langvarige forsøg.«

DBU gav en dispensation til at bruge Eir-bolden i 2013. De gennemførte senere en spørgeskemaundersøgelse om brugen af bolden, som de dog ikke ønsker at offentliggøre. Ét resultat var dog, at klubberne fandt det forvirrende at bruge to bolde, så [DBU standsede ordningen i 2018](#).

TILBAGE PÅ KUNSTGRÆSBANEN på Frederiksberg spiller de nu kamp. Amalie Mikkelsen kalder på bolden: »Fri, herovre, opad, OPAD.«

Hun tæmmer den på fløjen, tager et træk væk fra bakken, sætter vristen på og banker den mod mål i brysthøjde. Men målmand Kirstine Kjær redder den og sender tjept bolden ud til en medspiller. Hun oplever, at hun har meget lettere ved at gribe kvindebolden og kan skyde den længere frem på banen. Her er det værd at indskyde, at enkelte studier har vist, at ungdomsmålmand har færre håndskader, når de redder en lettere bold.

Frederik Nørgaards hold spiller *tiki-taka*. Masser af hurtige, korte pasninger – og ingen hovedstød.

»Det er ikke risikoen værd,« siger han og lyder som et ekko af de store fodboldforbund i USA, England og Tyskland, der enten har indført forbud eller opfordrer til at droppe hovedstød i hvert fald op til U13.

Det sker efter nogle rystende [forskningsresultater](#). Det begyndte i England, da neurologer kiggede ind i hjernen på den kun 59-årige afdøde angriber Jeff Astle i 2014. Den lignede en bokserhjerne. Få år senere stod det klart, at der var en sammenhæng mellem hovedstød, hjernerystelser og hjerneskrader. Mest alarmerende er det, at pigefodboldspillere har næsten samme risiko for hovedskader som drenge, der spiller amerikansk fodbold. [I 2021 viste et studie så](#), at pigernes skader oftest kommer fra hovedstød, hvor drengenes kommer fra sammenstød med andre spillere.

Derfor er det ikke usandsynligt, at især en lettere bold ville beskytte kvindernes hoveder.

Efter FIFAs første officielle VM i kvindefodbold i 1991, hvor en størrelse fem bold blev valgt frem for en størrelse fire, skrev de amerikanske spillere i en evaluering, at trykket i bolden eller størrelsen burde være mindre, fordi [»kvinder ser ud til oftere at få hovedpine«](#) af femmeren.

[Forskellige forsøg](#) med hovedmodeller har også vist, at jo mindre bold, jo mindre risiko for hovedskader ved hovedstød.

SÅ HVAD ER DER galt med FIFA? Hvorfor har de ikke for længst givet kvinderne deres egen bold? For at forstå det, må man forstå kvindefodboldens historie. En historie fyldt med latterliggørelse og mindreværd.

Danmark var også med til VM i 1991, og en af spillerne var Karina Sefton. 1,63 meter høj spillede hun i en størrelse XXL-trøje, hvor ærmerne gik ned over albuerne. Belønningen fra DBU var nogle sokker.

»Os gamle,« som hun kalder spillerne fra dengang, »vi var altid under pres. I hver kamp gjaldt det kvindefodboldens fremtid. Nu kigger pressen. Nu skal vi vise, at vi også kan spille fodbold.«

Hvis nogen dengang foreslog en mindre bold, var det stensikkert ment som en hån.

»Vi brugte så meget tid på ligestilling. Folk prøvede hele tiden at gøre os svagere og dummere, end vi var, altså hallo. Det med en mindre bold var som at sige, at vi ingenting kunne. Vi ville bare spille på de samme vilkår, på de samme baner som mændene,« siger Sefron.

De gamles kamp nåede et klimaks, da kvindelandsholdet endelig fik lov at spille på Danmarks nationalstadion, Parken, 24. juni.

Det er den seje, træge kamp for ligeberettigelse, som debatten om bolden bliver tolket ind i. Forslag om mindre baner og mål (hvilket i praksis vil være meget vanskeligere end at ændre bolden) bliver eksempelvis [lynhurtigt angrebet for at være sexistiske](#), og TV 2 kaldte det under kvindernes EM for en fordom at sige, at bolden er for tung til dem.

Det var helt sikkert en fordom, som det var nødvendigt at gøre op med, »men hver generation sin kamp«, som Majken Gilmartin siger.

U16-spilleren Amalie Mikkelsen, der står på skuldrene af kvinder som Sefron, kan i hvert fald ikke se, at der er noget nedværdigende i at spille med den mindre bold.

»Den gør mig jo bare dygtigere,« siger hun om bolden, der i øvrigt ligner en almindelig femmer i græsset. »Og jeg er ret ligeglad med, hvad andre siger. Så må de komme og prøve den.«

En af verdens bedste fodboldspillere, brasilianske Philippe Coutinho, har endda fortalt, hvordan det at spille med en mindre bold – futsalbolden – som barn gjorde ham til en bedre spiller. Spørgsmålet er faktisk, om fodbolden som helhed kunne have gavn af en mindre bold.

LENE TERP ER landsholdstræner for Færøerne og selv tidligere landsholdsspiller. Også hun mener, at den tunge bold giver problemer.

»Det er ikke rart at se på, at de her U16-piger ikke har power til at få den væk efter et målspark. Eliten har ingen problemer, men man skal ikke langt ned i rækkerne og til de yngre, før de har svært ved at flytte bolden rundt,« siger Terp.

Hun har fundet sin egen vej til mere kvindeegnede bolde. Hun tager simpelthen luften ud af dem.

»Mændene *pumper* de her bolde op. Det er til en hjernerystelse. Men jeg giver dem mellem 0,8 og 1 PSI (enhed for tryk, *red.*). Så er de mere behagelige.«

Gennem et langt fodboldliv har hun erfaret, at en femmer ikke er en femmer. En Adidas-bold føles hurtigt flad modsat en Select-bold. Nogle føles lettere end andre eller svæver bedre i luften.

»Man kan godt eksperimentere noget mere, specielt i ungdomsårene,« siger Terp og opfordrer til systematisk at undersøge forskellige bolde, der alle er inden for den margin for størrelse og vægt, som FIFA tillader.

Faktisk har Select lavet en »kvindebald« (som selvfølgelig har lyserøde striber), pudsig nok godt et år efter, at de afviste Majken Gilmartins forslag om at lave en bold sammen. Selects kvindebald går til grænsen af FIFAs krav og er dermed en lovlig femmer.

Stort set alle andre kvindetrænere fra ind- og udland, Weekendavisen har talt med, bakker op om, at de store fodboldorganer som DBU – der ikke har ønsket at udtale sig til denne artikel med henvisning til beslutningen i 2018 om ikke at bruge Eir-bolden – UEFA og FIFA bør få undersøgt, hvad ændringer af bolden kan gøre for skader, skud og afleveringer – for spillets skyld.

FA 2000-tropperne slutter af med en straffesparkskonkurrence. En efter en går de til bolden. Flere tonser den ud i aftenhimlen – som var de herrespillere. Amalie Mikkelsen scorer dog sikkert og fejrer det med en halv piruet, hvor armene trækkes ned langs kroppen – ligesom Ronaldo. »Sygt!« råber hun i landingen, og holdkammeraterne griner.

The women's ball

Equality. Full-grown men and slight teenage girls play with the same heavy football. Why? Maybe we can reduce the epidemic of knee and head injuries by making the ball just a little bit smaller?

Gunver Lystbæk Vestergård, Weekendavisen, August 18, 2022

"Play back, exactly, over there, play back, first touches, come on!" The U16 girls in the Frederiksberg club FA 2000 are instructed in a passing exercise by their coach, Frederik Nørgaard. They have their eyes on the ball. Sidestep and then a soft inside kick back to the partner.

Nørgaard presses them: "Play a little faster than you can keep up with."

After ten minutes, he sends them around the turf field dribbling with the ball and alternating between jogging and sprinting.

"We'll collapse if we have to take two more laps!" shouts one of the girls.

"No, you don't... Okay, we'll take a water break," Nørgaard replies.

An ordinary training evening for an ambitious first girls' team - and then again. At U16, the girls change from a size four football (63.5-66 centimeters in circumference and 350-390 grams) to a size five (68-70 centimeters and 410-450 grams). The "fiver" is the standard football throughout the world and has been since 1872, without anyone thinking much about it before or after. In other ball sports such as handball and basketball, there are different sizes of balls for men and women.

So Nørgaard's U16 girls actually had to play with the same ball as full-grown men in a shoe size 46. Even little short-legged Messi plays in a size 42, and on average woman's foot is ten percent smaller than a man's foot.

But the girls don't do that. Instead, last year Nørgaard bought 100 balls that are specially developed for women. They are 67 centimeters in circumference, and the weight is 368 grams – meaning a size 4.5.

"Why shouldn't they have a proper ball?" says Nørgaard with an unmistakable Aarhus dialect.

"They get so many injuries, those girls. My own daughter on the team got Schlatter knee (especially sore and inflamed knees, ed.). With this ball, they can also make real corner kicks and quicker passes."

Girls football players are some of the most injured athletes. Their risk of anterior cruciate ligament injury and other knee injuries is several times higher than boys'. Are some of them due to the ball size and weight?

Nørgaard has not had a single serious knee injury in his team since he started playing with the women's football, and that is unusual.

16-year-old Amalie Mikkelsen managed to play two years with the fiver before she switched to FA 2000.

"I've had teammates who didn't come back after a knee injury. I don't think they were physically ready to play with such a heavy ball."

The smaller ball, on the other hand, she thinks is liberating:

"It doesn't take as much force to place it on target, and it's smaller at the feet, so I don't have to use such large leg movements in the feints."

15-year-old Anabita Attaran can also feel a difference.

"My knees are much sorer when we have played a match with the fiver," she says.



Behind the women's ball, also called the Eir ball, is the innovative Majken Gilmartin, who was frustrated to see girl after girl, career after career, knee after knee being smashed. She herself had no meniscus left at the age of 16.

"No child should have surgery because of sports. Pretty early on I thought that there is something about that ball size. It was so strange that all the injuries came when we switched to the fiver. So through the English Football Association I found a factory in Pakistan that could produce a smaller ball, and then we simply made it."

She developed the ball together with colleagues in the B93 club and some of Denmark's most talented sports scientists, who also tested it. A survey among Germany's U17 players showed that 66 percent thought it was more fun to play with. The Danish Football Union (DBU) gave a

dispensation to use it, and Gilmartin appeared in The New York Times, among other things, but then momentum was lost. At the highest level in football, the interest simply weren't there.

Now, however, times are changing. More and more, it is said that women's football is its own sport, which should not suffer under the doctrines of men.

THE PHYSICAL DIFFERENCE between men and women affects the game of football. Associate professor at the Norwegian University of Science and Technology Arve Vorland Pedersen and two colleagues recently showed this in a review article from 2019. The most surprising finding was that men do not need to be supermen to play football at a high level, but women do. The game requires them to be in better physical shape than the male players, relative to the average man and woman. Some of that is the fault of the ball.

"Each pass costs a little more energy than for the men. So the women get tired faster. They have to run longer in relation to their capacity, and they make more passes," says Vorland Pedersen.

If the women have to make a pass over 20 metres, they will lift it into the air more often than the men, because it will require too much energy to roll it along the ground.

"The pass becomes more of a shot than a pass. Women then use the instep more, and thereby they lose hitting accuracy," says Vorland Pedersen, who has coached girls himself and always chose the lightest fiver balls for them. "The fact that the women play with a five is almost equivalent to the men having to play with a basketball."

His study also shows that the difference in kicking speed between men and women is much smaller than the difference in leg strength. The women thus compensate for the lack of strength by developing a better technique.

No one who watched the recent UEFA Women's Euro 2022 final between England and Germany can argue the ball there was too big. Rarely has a football match – regardless of gender – been so enchanting, and the 87,000 spectators at Wembley of all ages and genders electrified the English summer air. But what about all the amateur players who are not supposed to be European champions? In a senior women's team in the lowest ranks, barely a handful can make a high corner kick or goal kick, and the diagonal side shifts are wishful thinking. A professional youth coach also says that he has to train instep kicks two years before both the girls and boys switch to the fiver, because the ball cannot fly without a sublime technique.

ONE THING IS proper corners. More serious are all the injuries. Teenage girl football players have around four times higher risk of anterior cruciate ligament injury than boys of the same age, says Jesper Bencke, head of the Movement Laboratory at Hvidovre Hospital.

Anterior cruciate ligaments are the two elastic bands inside the knee that help to stabilize it. It can make a snap sound when one of them are torn, and experienced spectators shiver when they see a player collapse and grab the knee in pain.

"It's those explosive changes of direction that are dangerous," explains Bencke. "The knee comes out to the side, and the skewed load stresses the anterior cruciate ligament. The protection is primarily well-activated hamstring muscles."

The girls' problem is that during puberty they increase the amount of fat, while the boys get bigger muscles. Therefore, the girls do not become nearly as strong in the hamstrings in relation to their body weight and cannot protect the knee as well as the boys, at least one of the hypotheses reads.

The interesting thing is that the anterior cruciate ligament injuries are most frequent in the 16-year-olds, who have just changed to a size five ball.

"But the anterior cruciate ligament injuries don't happen when you have the ball," Bencke objects. "They are often seen in defenders because they pull out to the side to poke the ball when the opponent tries to dribble past."

Also, the most exposed to anterior cruciate ligament injuries are female *handball* players.

"On the other hand, I can imagine various overload injuries such as fiber damage in the front thigh and groin as a result of a ball that is too heavy," he adds, however.

Whether the Eir ball causes fewer injuries has been tested by Bencke's colleague and ditto anterior cruciate ligament specialist Mette Kreutzfeldt Zebis from University College Copenhagen. In 2017, she led a study that showed there were 22 percent more injuries among players who used a size five ball. However, the result was not statistically significant.

In Majken Gilmartin's club B93, a team of girls played with the ball for four years instead of the fiver. The team had one serious injury during the period.

"What you see elsewhere is catastrophic. Six girls on one team can be seriously injured in one season," says Gilmartin.

The results of two other studies with the women's football were published in 2012 and 2016. One with U18 players over ten matches and another with elite adult players over two matches. Laboratory tests had shown that the women could kick four to eight percent harder with the lighter ball, but in the matches there were virtually no differences. Except ... the players themselves reported less muscle soreness when playing with the smaller ball, in addition to being able to run at high speed for longer.

"But none of the studies are large enough to conclude anything definitive," says associate professor of physical education at Aarhus University Thomas Bull Andersen, who helped calculate the size of the women's ball and is a co-author of the studies. "Often you actually see a drop in performance at the start when you change something in the game, so longer trials are needed."

DBU gave a dispensation to use the Eir ball in 2013. They later carried out a survey about the use of the ball, which, however, they refuse to make public. One result, however, was that clubs found it confusing with two balls, so DBU discontinued the scheme in 2018.

BACK ON THE TURF at Frederiksberg, they are now playing a match. Amalie Mikkelsen calls for the ball: "Over here, up, UP."

She takes it down, dribbles past the one defender, puts her instep on and kick it towards the goal at chest height. But goalkeeper Kirstine Kjær saves it and sends the ball straight out to a teammate. She finds that it is much easier to handle the women's ball and she can shoot it further on the field. Here, it is worth adding that some studies have shown youth goalkeepers have fewer hand injuries when they save a lighter ball.

Frederik Nørgaard's team plays tiki-taka. Lots of fast passes – and no heading.

"It's not worth the risk," he says, and sounds like an echo of the major football associations in USA, England and Germany, which have either banned or advised against heading for children younger than 12 years of age.

The attitude change came after some shocking research results. It began in England when neurologists opened the brain of the only 59-year-old deceased striker Jeff Astle in 2014. It looked like a boxer's brain. A few years later it became clear that there was a connection between heading, concussions, and brain damage. Most alarmingly, female soccer players have almost the same risk of head injuries as boys playing American football. In 2021, a study then showed that girls' injuries most often come from heading, while boys' come from collisions with other players.

Therefore, it is not unlikely that a *lighter* ball in particular would protect the women's heads.

After FIFA's first official Women's World Cup in 1991, where a size five ball was chosen over a size four, the American players wrote in an evaluation that the pressure in the ball or the size should be smaller because "women seem to more often suffer from headache" after headings.

Various trials with head models have also shown that a smaller ball reduces the risk of head injuries from headings.

SO WHAT IS WRONG WITH FIFA? Why haven't they given the women their own ball long ago? To understand this, one must understand the history of women's football. A story filled with ridicule and inferiority.

Denmark also took part in the World cup in 1991, and one of the players was Karina Seifert. 1.63 meters tall, she played in a size XXL jersey, where the sleeves went down above the elbows. The reward from DBU was some socks.

"Us old girls," as she calls the players from back then, "we were always under pressure. In every game, the future of women's football was at stake. *Now* the press is watching. *Now* we must show that we can also play football."

If someone then suggested a smaller ball, it was almost certainly meant as mocking.

"We spent so much time on equality. People kept trying to make us weaker and dumber than we were, so really, the thing with a smaller ball was like saying we couldn't do anything. We just wanted to play on the same terms, on the same courts as the men," says Seifert.

The battle the old girls were fighting reached a climax when the women's national team was finally allowed to play at Denmark's national stadium, Parken, on 24 June.

It is that slow, tiring, and uphill battle for equality that the debate about the ball is interpreted into. Proposals for smaller pitches and goals (which in practice will be much more difficult than changing the ball) are, for example, quickly attacked for being sexist, and during the UEFA Women's Euro 2022 Danish TV 2 called it a prejudice to say that the ball is too heavy for them.

It *was* certainly a prejudice that needed to be dealt with, "but every generation has its own battle", as Majken Gilmartin says.

U16 player Amalie Mikkelsen, who stands on the shoulders of women like Sefron, does not find it degrading to play with the smaller ball.

"It just makes me more skilled," she says of the ball, which, by the way, looks like an ordinary fiver on the field. "And I don't really care what other people say. Then they can come and try it out."

One of the world's best footballers, Brazilian Philippe Coutinho, has even told how playing with a smaller ball – the futsal ball – as a child made him a better player. The question is then whether football as a whole could benefit from a smaller ball.

LENE TERP IS the national team coach for the Faroe Islands and herself a former national team player. She also believes that the heavy ball causes problems.

"It's not pleasant to see these U16 girls struggle to get the ball cleared after a goal kick. The elite have no problems, but you don't have to go far down the ranks and to the younger ones before they have difficulty moving the ball around," says Terp.

She has found her own way to more women friendly balls. She simply takes the air out of them.

"The men pump them up, so they feel like cannon balls. But I give them between 0.8 and 1 PSI (unit of pressure, ed.). Then they are more comfortable."

Through a long football life, she has learned that a fiver is not a fiver. An Adidas ball quickly feels flat in contrast to a Select ball. Some feel lighter than others or float better in the air.

"You can experiment a bit more, especially in the youth ranks," says Terp and calls for systematically examining different balls that are all within the margin for size and weight that FIFA allows.

In fact, Select has made a "women's ball" (which of course has pink stripes), oddly enough, just half a year after they rejected Majken Gilmartin's proposal to make a ball together. Select's women's ball goes to the limit of FIFA's requirements and is thus legal to play with.

Virtually all other women's coaches National and international that Weekendavisen has spoken to support the fact that the major football agencies such as DBU - who did not want to comment on this article with reference to the decision in 2018 not to use the Eir ball - UEFA and FIFA should investigate what changes to the ball can do to injuries, shots and passes - for the sake of the game.

The FA 2000 squads finish with a penalty shootout. One by one they go to the ball. Several of them kick it far into the evening sky – almost like watching a men's team. However, Amalie Mikkelsen scores and celebrates it with a half pirouette, where the arms are pulled down along the body - just like Ronaldo. "Yeah!" she shouts on landing, and her teammates laugh.