Bibliographic reference	**The American journal of gastroenterology 2000 95 (3) PAGES 712-714 Disappearance of endomysial antibodies in treated celiac disease does not indicate histological recovery Dickey, W., Hughes, D. F.et al.**
Study type	Cohort
Study quality	Could the selection of patients have introduced bias? UNCLEAR – not reported if a consecutive sample used Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? YES – 24 were excluded but explanation not given
Number of patients	53
Patient characteristics	Inclusion criteria: Presence of villous atrophy and positive IgA EMA Exclusion criteria: IgA deficiency, Non-compliance with diet or biopsy Age at diagnosis – mean (range): 51 years (16 – 81 years) Gender (M/F): 14/39 Immunoglobulin A (IgA) deficiency: None Time on gluten-free diet – mean (range) : 12 months Assessed by: Dietitian for adherence

Bibliographic reference	**The American journal of gastroenterology** **2000 95 (3) PAGES 712-714** **Disappearance of endomysial antibodies in treated celiac disease does not indicate histological recovery** **Dickey, W., Hughes, D. F.et al.**
Intervention	IgA EMA by indirect immunofluorescence using primate oesophagus (Biodiagnostics, Upto-upon-Severn, England) with a titer of ≥ 1.5 as cut-off Duodenal biopsy Dietitian assessment
Comparison	NA
Length of follow up	12 months
Location	Northern Ireland
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms 48/53 (90.6%) IgA EMA – number testing negative At 3 months = 13/53 (58% At 6 months = 50/53 (75%) At 9 months = not reported At 12 months = 46/53 (87%) Duodenal biopsy TVA/STVA at baseline (n = 41) At 12 months = 13 were normal, 18 had PVA and 10 were non-responders (persistent TVA/STVA) PVA at baseline (n = 12): At 12 months = 7 were normal, 1 was Marsh grade 1 and 4 were non-responders (persistent PVA) Growth in children and young people Not reported

Bibliographic reference	**The American journal of gastroenterology** **2000 95 (3) PAGES 712-714** **Disappearance of endomysial antibodies in treated celiac disease does not indicate histological recovery** **Dickey, W., Hughes, D. F.et al.**
	Complications of coeliac disease Not reported Dietary adherence 5/53 (9.4%) reported as non-adherent Impact on carers Not reported Health-related quality of life Not reported
Source of funding	None reported
Comments	All responders were adherent to GFD, non-responders were non-adherent Of 79 candidates for inclusion, 2 were EMA negative at baseline due to IgA deficiency, and 62 test EMA positive at baseline, 9 did not have a full 12 months of GFD, only 53 EMA + at baseline were followed up Study did not report on agreement or correlation between serology and biopsy

Bibliographic reference	**Autoimmunity** **2007 40 (2) PAGES 117-121** **Two-year follow-up of anti-transglutaminase autoantibodies among celiac children on gluten-free diet: comparison of IgG and IgA** **Martin-Pagola, Ainhoa, Ortiz-Paranza, Lourdeset al.**
Study type	Cohort
Study quality	Could the selection of patients have introduced bias? YES – unclear if a consecutive sample was used Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? NO
Number of patients	93
Patient characteristics	Inclusion criteria: ESPGHAN diagnosis of CD with HLA-DRB! Typing and GFD adherent Exclusion criteria: Non-adherence to GFD Age at diagnosis – mean (range): 3.56 years (0.94 – 17.5) Gender (M/F): 35/58 (62.4% female) Immunoglobulin A (IgA) deficiency: Not reported

Bibliographic reference	**Autoimmunity** **2007 40 (2) PAGES 117-121** **Two-year follow-up of anti-transglutaminase autoantibodies among celiac children on gluten-free diet: comparison of IgG and IgA** **Martin-Pagola, Ainhoa, Ortiz-Paranza, Lourdeset al.**
	Time on gluten-free diet – mean (range): 2 years Assessed by: Not reported
Intervention	IgA anti-tTG IgG anti-tTG Both determined by immunoprecipitation radioassays. S25 labeled human recombinant tTGase was incubated with 3µl of serum at 4oC overnight and immune complexes were precipitated with a 25% (v/V) suspension of protein-A agarose (Amersham Biosciences, Barcelona, Spain) for IgG or a 20% (v/v) suspension of agarose-conjugated IgA specific antibodies (Sigma cat. No. A2691) St Louis, MO) for IgA. Cut-off values were set as the sum of the mean and 3/SD of the index values of 50 serum samples from the general population.
Comparison	NA
Length of follow up	24 months
Location	Spain
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms (reported as remission) Not reported Response – defined as number of people testing negative on serology At 6 months IgA: 46/93 (49%) IgG: 59/93 (63%) At 24 months IgA: 82/93 (88%) IgG: 90/93 (96%)

Bibliographic reference	**Autoimmunity** **2007 40 (2) PAGES 117-121** **Two-year follow-up of anti-transglutaminase autoantibodies among celiac children on gluten-free diet: comparison of IgG and IgA** **Martin-Pagola, Ainhoa, Ortiz-Paranza, Lourdeset al.**
	Biopsy – response = normal biopsy N = 41* Of those with Marsh 3a or 3b at diagnosis 4 (9%) were Marsh 2 12 (30%) were Marsh 1 25 (61%) were Marsh 0 Growth in children and young people Not reported Complications of coeliac disease Not reported Dietary adherence Not reported Impact on carers Not reported Health-related quality of life Not reported
Source of funding	Funded by the Spanish Ministry of Health
Comments	Only 41 consented to a second biopsy after 2 year GFD Only those with elevated serology titers at baseline followed up

Bibliographic reference	**Autoimmunity** **2007 40 (2) PAGES 117-121** **Two-year follow-up of anti-transglutaminase autoantibodies among celiac children on gluten-free diet: comparison of IgG and IgA** **Martin-Pagola, Ainhoa, Ortiz-Paranza, Lourdeset al.**
	Study did not report on agreement or correlation between serology and biopsy

Bibliographic reference	**Journal of internal medicine** **2004 256 (6) PAGES 519-524** **Antibody levels in adult patients with coeliac disease during gluten-free diet: a rapid initial decrease of clinical importance** **Midhagen, G., Aberg, A. K.et al.**
Study type	Cohort
Study quality	Could the selection of patients have introduced bias? NO Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. Yes – unclear of exact timing of tests Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? NO
Number of patients	20
Patient characteristics	Inclusion criteria: Diagnosed with CD with March 3 criteria Exclusion criteria: IgA deficiency

Bibliographic reference	**Journal of internal medicine** **2004 256 (6) PAGES 519-524** **Antibody levels in adult patients with coeliac disease during gluten-free diet: a rapid initial decrease of clinical importance** **Midhagen, G., Aberg, A. K.et al.**
	Age at diagnosis – median (range): 62 years (29 – 86 years) Gender (M/F): 10/12 (54.5% female) Immunoglobulin A (IgA) deficiency: NA Time on gluten-free diet – mean (range) : 12 months Assessed by: Dietitian for adherence
Intervention	AGA (AGA was tested using UniCAP Gliadin IgA (Pharmacia Diagnostics, Uppsala, Sweden) and was defined as positive with a result >3 $mg_A\ L^{-1}$.) tTGgrh (Celikey®, tTGrh, IgA antibody assay (Pharmacia Diagnostics, Freiburg, Germany). It was defined by the producer as positive when >8 U mL^{-1}, negative when <5 U mL^{-1}, borderline between 5 and 8 U mL^{-1}) tTGgp (ImmuLisa®, tTGgp with guinea-pig-derived tTG (IMMCO, Buffalo, NY, USA). The result was defined by the producer as positive when >25 U, negative when <20 U, borderline when 20–25 U) IgA EMA (indirect immunofluoflourescence using monkey oesophageal tissue. Tissue sections from marmoset monkey oesophagus were mounted on microscopic slides. Undiluted sera and sera diluted 1 : 25 with phosphate-buffered saline (PBS) was applied to slides, which were incubated for 30 min at room temperature. After washing with PBS the sections were covered with fluorescein conjugated rabbit-antihuman IgA (Dako, Copenhagen, Denmark) for 30 min, washed with PBS and examined by fluorescence microscopy. Positive sera were further diluted (1 : 5, 1 : 10, 1 : 25, 1 : 100, 1 : 400 and 1 : 1600). Sera positive in dilution 1 : 10 or more were defined as positive Biopsy (Three to four biopsy specimens were obtained during upper endoscopic examination of each patient from the lower part of the duodenum descendens with standard forceps. All biopsies were fixed in a 4% buffered formaldehyde solution. Fixation, embedding and cutting were carried out according to routine methods)
Comparison	NA

Bibliographic reference	**Journal of internal medicine** **2004 256 (6) PAGES 519-524** **Antibody levels in adult patients with coeliac disease during gluten-free diet: a rapid initial decrease of clinical importance** **Midhagen, G., Aberg, A. K.et al.**
Length of follow up	12 months
Location	Sweden
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms (reported as remission) 16/18 (88.9%) Response – defined as number of people testing negative on serology <u>AGA IgA</u> at 3 months =9/114 (74%) at 6 months = 14/15 (93%) at 9 months = not reported at 12 months = 15/15 (100%) <u>IgA EMA</u> at 3 months =7/17 (41%) at 6 months = 13/17 (65%) at 9 months = not reported at 12 months = 14/16 (87%) <u>IgA tTGrh</u> at 3 months = 8/14 (57%) at 6 months = 10/14 (71%) at 9 months = not reported at 12 months = 14/14 (100%)

Bibliographic reference	**Journal of internal medicine** **2004 256 (6) PAGES 519-524** **Antibody levels in adult patients with coeliac disease during gluten-free diet: a rapid initial decrease of clinical importance** **Midhagen, G., Aberg, A. K.et al.**
	Biopsy – response = normal biopsy At 12 months = 16/18 (88.9%) Growth in children and young people Not reported Complications of coeliac disease Not reported Dietary adherence Not reported Impact on carers Not reported Health-related quality of life Not reported
Source of funding	Authors are research staff at Pharmacia Diagnostic manufactirers fo some of the testing kits but they state no financial support was received.
Comments	1 person excluded for IgA deficiency and 1 not included in results as they stopped the GFD 2 participants did not have a repeat biopsy at 12 months, Both non-responders at 12 months were in remission at follow-up biopsy but no timeframe reported Study did not report on agreement or correlation between serology and biopsy

Bibliographic reference	**Journal of internal medicine** **2004 256 (6) PAGES 519-524** **Antibody levels in adult patients with coeliac disease during gluten-free diet: a rapid initial decrease of clinical importance** **Midhagen, G., Aberg, A. K.et al.**

Bibliographic reference	**Journal of pediatric gastroenterology and nutrition** **2011 53 (1) PAGES 55-60** **Use of deamidated gliadin peptide antibodies to monitor diet compliance in childhood celiac disease** **Monzani, Alice, Rapa, Annaet al**
Study type	Cohort (Prospective)
Study quality	Could the selection of patients have introduced bias? YES – unclear of study numbers and how the sample were selected Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? NO

Bibliographic reference	**Journal of pediatric gastroenterology and nutrition** **2011 53 (1) PAGES 55-60** **Use of deamidated gliadin peptide antibodies to monitor diet compliance in childhood celiac disease** **Monzani, Alice, Rapa, Annaet al**
Number of patients	28
Patient characteristics	Inclusion criteria: Newly diagnosed CD Exclusion criteria: None reported Age at diagnosis – median (range): 8.1 years (1 – 16.8 years) Gender (M/F): 11/17 (60.7% female) Immunoglobulin A (IgA) deficiency: Not reported Time on gluten-free diet – mean (range) : 12 months Assessed by: Dietitian for adherence
Intervention	a-DGP IgA (performed with Quanta Lite Gliadin IgA II with suggested cutoff of 20 arbitrary unites) a-DGP IgA+G (performed with Quanta Lite Celiac DGP screen with suggested cutoff of 20 arbitrary unites) anti-tTG gA (performed withEliA Celikey IgA with cutoff of 10U/ml) AGA IgA (perfomed wih EliA Gliadin IgA with cut-off of 10U/ml)
Comparison	NA
Length of follow up	12 months
Location	Italy
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms Not reported Growth in children and young people Not reported

Bibliographic reference	**Journal of pediatric gastroenterology and nutrition** **2011 53 (1) PAGES 55-60** **Use of deamidated gliadin peptide antibodies to monitor diet compliance in childhood celiac disease** **Monzani, Alice, Rapa, Annaet al**

Complications of coeliac disease
Not reported

Dietary adherence
Accuracy of serology in detecting 'partially adherent' from 'strictly adherent'

	Partially adherent	Strictly adherent
a DGP IgA + at 2-4 months	7	8
a DGP IgA – at 2-4 months	1	5
a DGP IgA + at 6-8 months	4	1
a DGP IgA – at 6-8 months	1	7
a DGP IgA + at 9-12 months	4	1
a DGP IgA – at 9-12 months	3	10

	Partially adherent	Strictly adherent
a DGP IgA/G + at 2-4 months	7	9
a DGP IgA/G – at 2-4 months	1	4
a DGP IgA/G + at 6-8 months	5	2
a DGP IgA/G – at 6-8 months	0	6
a DGP IgA/G + at 9-12 months	9	3
a DGP IgA/G – at 9-12 months	0	8

<table>
<tr><td>Bibliographic reference</td><td>Journal of pediatric gastroenterology and nutrition
2011 53 (1) PAGES 55-60
Use of deamidated gliadin peptide antibodies to monitor diet compliance in childhood celiac disease
Monzani, Alice, Rapa, Annaet al</td></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>Partially adherent</td><td>Strictly adherent</td></tr>
<tr><td>Anti tTG IgA + at 2-4 months</td><td>8</td><td>7</td></tr>
<tr><td>Anti tTG IgA – at 2-4 months</td><td>0</td><td>6</td></tr>
<tr><td>Anti tTG IgA + at 6-8 months</td><td>4</td><td>5</td></tr>
<tr><td>Anti tTG IgA – at 6-8 months</td><td>1</td><td>3</td></tr>
<tr><td>Anti tTG IgA + at 9-12 months</td><td>5</td><td>5</td></tr>
<tr><td>Anti tTG IgA – at 9-12 months</td><td>4</td><td>6</td></tr>
</table>
<table>
<tr><td></td><td>Partially adherent</td><td>Strictly adherent</td></tr>
<tr><td>AGA IgA + at 2-4 months</td><td>3</td><td>1</td></tr>
<tr><td>AGA IgA – at 2-4 months</td><td>5</td><td>12</td></tr>
<tr><td>AGA IgA + at 6-8 months</td><td>1</td><td>0</td></tr>
<tr><td>AGA IgA – at 6-8 months</td><td>4</td><td>8</td></tr>
<tr><td>AGA IgA + at 9-12 months</td><td>0</td><td>1</td></tr>
<tr><td>AGA IgA – at 9-12 months</td><td>9</td><td>10</td></tr>
</table>
Impact on carers
Not reported

Health-related quality of life
Not reported
</td></tr>
<tr><td>Source of funding</td><td>‘Study was partially funded by a grant of the Regione Piemonte government’</td></tr>
</table>

Bibliographic reference	**Journal of pediatric gastroenterology and nutrition** **2011 53 (1) PAGES 55-60** **Use of deamidated gliadin peptide antibodies to monitor diet compliance in childhood celiac disease** **Monzani, Alice, Rapa, Annaet al**
Comments	Study did not report on agreement or correlation between serology and biopsy

Bibliographic reference	**Digestive diseases and sciences** **1999 44 (10) PAGES 2133-2138** **Clinical application of immunological markers as monitoring tests in celiac disease** **Fotoulaki, M., Nousia-Arvanitakis, S.et al**
Study type	Cohort (Prospective)
Study quality	Could the selection of patients have introduced bias? UNCLEAR – not reported if consecutive sample used Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO

Bibliographic reference	**Digestive diseases and sciences** **1999 44 (10) PAGES 2133-2138** **Clinical application of immunological markers as monitoring tests in celiac disease** **Fotoulaki, M., Nousia-Arvanitakis, S.et al**
	Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? NO
Number of patients	30
Patient characteristics	Inclusion criteria: Diagnosis of CD according to EPSGHAN criteria Exclusion criteria: None reported Age at diagnosis – mean (range): 6 (1 – 24 years) Gender (M/F): 13/17 (56.7% female) Immunoglobulin A (IgA) deficiency: 3/30 (10%) Time on gluten-free diet – mean (range) : 12 months Assessed by: Not reported
Intervention	IgA EMA Ig ARA
Comparison	NA
Length of follow up	12 months
Location	Greece
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms Not reported Response – defined as the number of people testing negative on serology <u>IgA EMA</u> At 3 months = 17/30 (57%) At 6 months = 25/30 (83%) At 9 months = 17/30 (90%)

Bibliographic reference	**Digestive diseases and sciences** **1999 44 (10) PAGES 2133-2138** **Clinical application of immunological markers as monitoring tests in celiac disease** **Fotoulaki, M., Nousia-Arvanitakis, S.et al**
	At 12 months = 30/30 (100%) <u>Ig ARA</u> At 3 months = 23/30 (77%) At 6 months = 26/30 (87%) At 9 months = 30/30 (100%) At 12 months = 30/30 (100%) Growth in children and young people Not reported Complications of coeliac disease Not reported Dietary adherence Not reported Impact on carers Health-related quality of life Not reported
Source of funding	None reported
Comments	This study reports that ‘as the half-life of IgA is shorter than that of IgG, the IgA antibodies respond more rapidly to gluten changes in the diet and, therefore, are more appropriate for the follow-up of CD patients” IgA AGA and IgG AGA examined with home-made kits also studied so data were not used in this review

Bibliographic reference	**Digestive diseases and sciences** **1999 44 (10) PAGES 2133-2138** **Clinical application of immunological markers as monitoring tests in celiac disease** **Fotoulaki, M., Nousia-Arvanitakis, S.et al**
	Study did not report on agreement or correlation between serology and biopsy

Bibliographic reference	**Scandinavian journal of gastroenterology** **2013 48 (6) PAGES 764-766** **Rapid anti-transglutaminase assay and patient interview for monitoring dietary compliance in celiac disease** **Zanchi, Chiara, Ventura, Alessandroet al.**
Study type	Cohort (Prospective)
Study quality	Could the selection of patients have introduced bias? UNCLEAR – not reported if a consecutive ample used Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO

Bibliographic reference	**Scandinavian journal of gastroenterology** **2013 48 (6) PAGES 764-766** **Rapid anti-transglutaminase assay and patient interview for monitoring dietary compliance in celiac disease** **Zanchi, Chiara, Ventura, Alessandroet al.**
	Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? YES – 35 (10%) of the study population did not report on dietary adherence
Number of patients	350
Patient characteristics	Inclusion criteria: ESPGHAN diagnosed CD Exclusion criteria: None reported Age at diagnosis – median (range): 14 (6 – 45) Gender (M/F): 123/227 (65% female) Immunoglobulin A (IgA) deficiency: Not reported Time on gluten-free diet – mean (range) : 24 months Assessed by: Not reported
Intervention	IgA -anti-tTG using ELISA methods (Eu-tTG, Eurospital, Trieste, IT) using manufacturers cut-offs (IgA <9 U/ml) Rapid test (Eu-tTG Quick, Eurospital, Trieste, IT) using manufacturers cut-off
Comparison	NA
Length of follow up	24 months
Location	Italy
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms Not reported Growth in children and young people Not reported Response Not reported

<table>
<tr><th>Bibliographic reference</th><th>Scandinavian journal of gastroenterology
2013 48 (6) PAGES 764-766
Rapid anti-transglutaminase assay and patient interview for monitoring dietary compliance in celiac disease
Zanchi, Chiara, Ventura, Alessandroet al.</th></tr>
<tr><td></td><td>
Complications of coeliac disease
Not reported

Dietary adherence
Reported as diagnostic accuracy of detecting ‘self-reported’ partially adherent to GFD at 24 months
<table>
<tr><th></th><th>Partially adherent</th><th>Strictly adherent</th></tr>
<tr><td>IgA anti-tTG ELISA +</td><td>19</td><td>8</td></tr>
<tr><td>IgA anti-tTG ELISA -</td><td>24</td><td>264</td></tr>
</table>
<table>
<tr><th></th><th>Partially adherent</th><th>Strictly adherent</th></tr>
<tr><td>Rapid test +</td><td>19</td><td>5</td></tr>
<tr><td>Rapid test -</td><td>24</td><td>267</td></tr>
</table>
Impact on carers
Not reported

Health-related quality of life
Not reported
</td></tr>
<tr><td>Source of funding</td><td>Authors report no conflict of interests</td></tr>
<tr><td>Comments</td><td>Unclear if all data reported for rapid test
Participants were questioned about the number of dietary transgressions in previous six months but no further details given</td></tr>
</table>

Bibliographic reference	**Scandinavian journal of gastroenterology** **2013 48 (6) PAGES 764-766** **Rapid anti-transglutaminase assay and patient interview for monitoring dietary compliance in celiac disease** **Zanchi, Chiara, Ventura, Alessandroet al.**
	Study did not report on agreement or correlation between serology and biopsy

Bibliographic reference	**Laboratory Medicine** **2011 42 (8) PAGES 497-501** **Importance of the educational environment in the evolution of celiac disease** **Samasca, G., Iancu, M.et al.**
Study type	Cohort (prospective)
Study quality	Could the selection of patients have introduced bias? UNCLEAR – not reported if a consecutive ample used Is there concern that the included patients do not match the review question? UNCEAR – age group not reported Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO

Bibliographic reference	**Laboratory Medicine** **2011 42 (8) PAGES 497-501** **Importance of the educational environment in the evolution of celiac disease** **Samasca, G., Iancu, M.et al.**
	Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? NO
Number of patients	50
Patient characteristics	Inclusion criteria: Diagnosis of CD based on the presence of flattened intestinal villi on duodenal biopsy. Exclusion criteria: None reported Age at diagnosis – mean (sd): mean not reported range 6 – 11 years Gender (M/F): 17/33 (67% female) Immunoglobulin A (IgA) deficiency: Not reported Time on gluten-free diet – 24 months
Intervention	.IgA tTG
Comparison	NA
Length of follow up	24 months
Location	Romania
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms Not reported number of people with negative test results IgA tTG at 3 months = 34/50 (68%) at 6 months = 34/50 (68%) at 9 months – not reported at 12 months = 41/50 (82%) at 24 months = 40/50 (80%)

Bibliographic reference	**Laboratory Medicine** **2011 42 (8) PAGES 497-501** **Importance of the educational environment in the evolution of celiac disease** **Samasca, G., Iancu, M.et al.**
	Growth in children and young people Not reported Complications of coeliac disease Not reported Dietary adherence Not reported Impact on carers Not reported Health-related quality of life Not reported
Source of funding	The authors report no conflicts of interest.
Comments	Study did not report on agreement or correlation between serology and biopsy

Bibliographic reference	**Autoimmune Diseases** **2014, Article ID 623514, 7 pages, 2014** **Celiac disease in adult patients: specific autoantibodies in the diagnosis, monitoring, and screening,** **Trigoni, E., Tsirogianni, A et al**
Study type	Cohort (Retrospective)
Study quality	Could the selection of patients have introduced bias? UNCLEAR not reported if a consecutive sample used Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? NO
Number of patients	70
Patient characteristics	Inclusion criteria: Newly diagnosed with CD Exclusion criteria: None reported Age at diagnosis – mean (sd): 39 years (11.1) Gender (M/F): 20/50 (71.4% female) Immunoglobulin A (IgA) deficiency: 0/70 (0%) Time on gluten-free diet – 36 months Assessed by: Not reported

Bibliographic reference	**Autoimmune Diseases** **2014, Article ID 623514, 7 pages, 2014** **Celiac disease in adult patients: specific autoantibodies in the diagnosis, monitoring, and screening,** **Trigoni, E., Tsirogianni, A et al**
Intervention	Anti-endomysium (EmA) which were determined semiquantitative by the technique of indirect immunofluorescence (IIF) using a commercial kit INOVA (NOVA Lite Monkey Oesophagus IFA Kit/Slides, USA) on a 5-μm-thin cryostat section of distal monkey oesophagus as antigen substrate. Patient samples were tested in dilutions ranging from 1 : 5 to 1 : 2560. The antibody titre was defined as the highest sample dilution yielding fluorescence. Titre below1 : 5 was considered negative. Anti-tissue transglutaminase class IgA (tTG-A) which were assayed using a commercial anti-tTG type IgA ELISA test kit (QUANTA LiteTM, INOVA Diagnostics, USA). The cut-off value provided was 25U. ELISA was performed in duplicate according to the manufacturer's instruction.
Comparison	NA
Length of follow up	36 months
Location	Greece
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms Not reported Growth in children and young people Not reported Response reported as number of people testing negative serology among those who were strictly compliant <u>IgA EMA</u> At 6 months = 20/51 (39.2%) At 12 months = 37/51 (72.5%) At 36 months = 48/51 (94.1%) <u>IgA tTG</u> At 6 months = 10/51 (19.6%) At 12 months = 25/51 (49.0%)

Bibliographic reference	**Autoimmune Diseases** **2014, Article ID 623514, 7 pages, 2014** **Celiac disease in adult patients: specific autoantibodies in the diagnosis, monitoring, and screening,** **Trigoni, E., Tsirogianni, A et al**
	At 36 months = 41/51 (80.4%) Complications of coeliac disease Not reported Dietary adherence 19 were considered partially adherent while 51 were considered strictly adherent Impact on carers Not reported Health-related quality of life Not reported
Source of funding	No funding reported but conflicts of interest listed
Comments	Unable to calculate data for accuracy of detecting non-adherence Study did not report on agreement or correlation between serology and biopsy

Bibliographic reference	**Clinical chemistry** **2002 48 (6 Pt 1) PAGES 960-963** **Comparative evaluation of serologic tests for celiac disease diagnosis and follow-up** **Martini, Silvia, Mengozzi, Giulioet al**
Study type	Cohort (prospective)
Study quality	Could the selection of patients have introduced bias? NO Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? NO
Number of patients	101
Patient characteristics	Inclusion criteria: CD confirmed buy biopsy (Marsh 2 or March 3) and positive clinical response to GFD Exclusion criteria: None reported Age at diagnosis – median (range): 37 years (21 – 72) Gender (M/F): 22/79 (78.1% female) Immunoglobulin A (IgA) deficiency: (%) Time on gluten-free diet – 12 months Assessed by: Not reported
Intervention	Serum EmAs were detected by immunofluorescence, using commercial slides of monkey esophagus (The Binding Site Ltd., distributed by Alfa Biotech). Sera were tested, as indicated by the manufacturer, at a 1:10 initial dilution, with the inclusion of positive and negative controls in every batch of tests. CD EmA-negative sera were further tested at a 1:5 dilution, and no false-negative results were obtained.

Bibliographic reference	**Clinical chemistry** **2002 48 (6 Pt 1) PAGES 960-963** **Comparative evaluation of serologic tests for celiac disease diagnosis and follow-up** **Martini, Silvia, Mengozzi, Giulioet al**
	Used four commercially available sandwich ELISAs that use human recombinant antigen (h-tTG): h-tTG 1 (DRG Diagnostics, distributed by Pantec S.r.l.); h-tTG 2 (EU-tTG® IgA; Eurospital S.p.A); h-tTG 3 (Immunodiagnostik, distributed by Li StarFISH); and h-tTG 4 (CELIKEYTM; Pharmacia & Upjohn, which uses human recombinant antigen extracted from eukaryotic cells. The same evaluation was also carried out with a sandwich ELISA that uses guinea pig tTG antigen (gp-tTG; GENESIS Diagnostics, distributed by Pantec S.r.l Duodenal biopsy
Comparison	NA
Length of follow up	12 months
Location	Italy
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms Not reported Growth in children and young people Not reported Response reported as number of people normal duodenal biopsy at 12 months Normal (mucosal recovery) = 12/101 (12%) Improvement (Marsh grade I) = 51/101 (50%) no change (Marsh grade II or III) = 38/101 (38%) Complications of coeliac disease Not reported Dietary adherence NA

Bibliographic reference	**Clinical chemistry** **2002 48 (6 Pt 1) PAGES 960-963** **Comparative evaluation of serologic tests for celiac disease diagnosis and follow-up** **Martini, Silvia, Mengozzi, Giulioet al**
	Impact on carers Not reported Health-related quality of life Not reported
Source of funding	None reported
Comments	Mean percentage changes in anti-tTG values were 81% (range, 75–86%) for h-tTG 1, 51% (range, 43–60%) for h-tTG 2, 51% (range, 42–61%) for h-tTG 3, 77% (range, 69–85%) for h-tTG 4, and 75% (range, 67–82%) for gptTG. The concordances of the different assays in both positive (persistent histologic impairment and positive serologic markers) and negative (reconstituted mucosa and negative serologic markers) individuals vs histologic score were 29% for h-tTG 1, 65% for h-tTG 2, 14% for h-tTG 3, 16% for h-tTG 4, and 19% for gp-tTG, compared with 48% for EmA testing.

Bibliographic reference	**Journal of human nutrition and dietetics : the official journal of the British Dietetic Association** **2013 26 (4) PAGES 349-358** **Nutritional inadequacies of the gluten-free diet in both recently-diagnosed and long-term patients with coeliac disease** **Shepherd, S. J. and Gibson, P. R**
Study type	Cohort (prospective)
Study quality	Could the selection of patients have introduced bias? NO Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO Is there concern that the target condition as defined by the reference standard does not match the review question? Could the patient flow have introduced bias? YES not all recruited were assessed 7/57 (12%) not assessed
Number of patients	50
Patient characteristics	Inclusion criteria: newly diagnosed CD using EPSGHAN criteria Exclusion criteria: None reported Age at diagnosis – median (range): 44 years (18 – 71) Gender (M/F): 17/33 (71% female) Immunoglobulin A (IgA) deficiency: 0/50 (0%) Time on gluten-free diet – 12 months Assessed by: Dietitian for adherence
Intervention	Biochemical and haematological indices were measured in peripheral blood samples taken from all patients at entry to the studies and, additionally, at 3, 6 and 12 months for the newly-diagnosed cohort. These included a complete blood count, electrolytes, renal function, liver function tests and iron studies, as well as serum folate, vitamin B12, zinc, vitamin D, magnesium, calcium and phosphate, using routine methodologies. Patients also had a repeat and histopathological

Bibliographic reference	**Journal of human nutrition and dietetics : the official journal of the British Dietetic Association** **2013 26 (4) PAGES 349-358** **Nutritional inadequacies of the gluten-free diet in both recently-diagnosed and long-term patients with coeliac disease** **Shepherd, S. J. and Gibson, P. R**
	examination of duodenal biopsies or close to 12 months after the initial assessment. Patients were then educated in a nutritionally adequate 'no detectable gluten' diet, which was recommended to be followed for life. Education included description of the five-food-group healthy-eating model, including recommended servings and attention to fibre and variety in the diet. At the first interview, all patients were asked to keep a 7- day food record. Patients were provided with a recording diary card and instructions for its completion. They were asked to record the type and brand of food and how much was eaten or drunk using household measures on each day for the 7-day period before the review appointment. Measuring cups, spoons and reference diagrams were provided. Recorded information was checked at the consultation Adherence to the GFD diet was evaluated in detail at every interview by direct questions about any gluten consumed, either accidentally or intentionally in the time since their last review, by specific questioning and, if available, by the 7-day food diary entries.
Comparison	NA
Length of follow up	12 months
Location	Australia
Outcomes measures and effect size	Resolution of gastrointestinal and non-gastrointestinal symptoms Not reported Growth in children and young people Not reported Complications of coeliac disease Not reported Dietary adherence

Bibliographic reference	**Journal of human nutrition and dietetics : the official journal of the British Dietetic Association** **2013 26 (4) PAGES 349-358** **Nutritional inadequacies of the gluten-free diet in both recently-diagnosed and long-term patients with coeliac disease** **Shepherd, S. J. and Gibson, P. R**
	50/50 (100%) 5/50 (10%) did not meet target nutrient density* Impact on carers Not reported Health-related quality of life Not reported
Source of funding	Supported by a Dora Lush Scholarship from the NHMRC of Australia and a Grant in Aid from the Australian and New Zealand Coeliac Research Fund.
Comments	7 participants excluded from analysis due to incomplete follow-up This applied to four nutrients (fibre, vitamin A, calcium, zinc; and fibre, folate, calcium, iron) in two patients, two nutrients (fibre, folate; and thiamin, folate) in two patients, and one nutrient (fibre) in one. Inadequate nutrient intake was associated with inadequate overall food intake (in relation to EER) for fibre, thiamin, calcium, magnesium and folate ($P < 0.05$ Fisher's exact test). Only for iron ($P = 0.23$) and vitamin A ($P = 1.0$) was inadequate intake independent of volume of food eaten.

Bibliographic reference	**Gastroenterology Today** **2005 Issue 1 PAGES 11-12** **Dietitian-led Coeliac Clinic:A successful change in working practice in modern healthcare** **Wylie, c., Geldart., S., et al**
Study type	Before and after study
Study quality	Could the selection of patients have introduced bias? YES – Convenience sample used Is there concern that the included patients do not match the review question? NO Could the conduct or interpretation of the index test have introduced bias?. NO Is there concern that the index test, its conduct, or interpretation differ from the review question? NO Could the reference standard, its conduct, or its interpretation have introduced bias? NO Is there concern that the target condition as defined by the reference standard does not match the review question? NO Could the patient flow have introduced bias? YES – unclear of numbers in 'before' phase of study Study reports on 99 patients, 78 of whom were not previously under hospital review
Number of patients	99
Patient characteristics	Inclusion criteria: Adults with histology present CD Exclusion criteria: Not reported Age at diagnosis – Range: 23 – 86 (Mean or median not reported) Gender (M/F): 30/69 (69.7% female) Immunoglobulin A (IgA) deficiency: Not reported Time on gluten-free diet – mean (range) : Not reported Assessed by: Dietitian for adherence
Intervention	Introduction of a dietitian into a Coeliac clinic

<table>
<tr><th>Bibliographic reference</th><th>Gastroenterology Today
2005 Issue 1 PAGES 11-12
Dietitian-led Coeliac Clinic:A successful change in working practice in modern healthcare
Wylie, c., Geldart., S., et al</th></tr>
<tr><td>Comparison</td><td>12 months before introduction of dietitian</td></tr>
<tr><td>Length of follow up</td><td>12 months</td></tr>
<tr><td>Location</td><td>United Kingdom</td></tr>
<tr><td>Outcomes measures and effect size</td><td>Resolution of gastrointestinal and non-gastrointestinal symptoms
Not reported

Growth in children and young people
Not reported

Complications of coeliac disease – reported at 1 year
<u>DEXA scan</u>
Normal = 41 (42%)
Ostopenia = 37 (39%)
Osteoporosis = 18 (19%)

19 were referred for gastroenterology review due to abnormal findings on serology or symptoms. Further investigation lead to 1 case of caecal carcinoma, hypo-thyroidism, iron deficiency anaemia in pregnancy and adjustment of B12 therapy

Dietary adherence
<table>
<tr><th></th><th>12 months pre-dietitian</th><th>12 months With Dietitian</th></tr>
<tr><td>Perceived dietary adherence</td><td>71 (72%)</td><td>76 (77%)</td></tr>
<tr><td>Actual dietary adherence</td><td>54 (54%)</td><td>65 (66%)</td></tr>
<tr><td>Satisfaction</td><td>42 (42%)</td><td>80 (100%)</td></tr>
</table>
Impact on carers</td></tr>
</table>

Bibliographic reference	**Gastroenterology Today** **2005 Issue 1 PAGES 11-12** **Dietitian-led Coeliac Clinic:A successful change in working practice in modern healthcare** **Wylie, c., Geldart., S., et al**
	Not reported Health-related quality of life Not reported
Source of funding	None reported
Comments	

Bibliographic reference	**Galli (2014) Histological recovery and gluten-free diet adherence: a prospective 1 year follow-up study of adult patients with coeliac disease.**
Study type	Prospective cohort study
Study quality	Moderate
Number of patients	N = 65
Patient characteristics	65 consecutive patients newly diagnosed with CD were included 72.3% female Median age = 38 years, range 18 - 70
Intervention	One year prospective follow up using: • A questionnaire of dietary adherence • serological testing to measure seroconversion • histological recovery investigated through intestinal biopsy

Bibliographic reference	Galli (2014) Histological recovery and gluten-free diet adherence: a prospective 1 year follow-up study of adult patients with coeliac disease.
	serology for Iga EMA, adherence, and histology assessed at baseline and post one year after instructed to follow a GFD.
Comparison	Not applicable.
Length of follow up	1 year
Location	Italy
Outcomes measures and effect size	• Overall, 81.5% of all patients were assessed to have adequate dietary adherence (ADA) • 18.5% had inadequate dietary adherence (IADA) • ADA grop n = 53; IADA n = 12 • 66% ADA and 0% IADA patients achieved complete histological recovery (p=0.0001) • In ADA patients, antibody seroconversion and symptoms were not significantly different between patients who had achieved complete histological recovery and those with partial recovery • Multivariate analysis revealed Marsh 3 C (complete villous atrophy) was a risk factor for incomplete histological recovery in ADA patients - OR = 8.74, 95% CI: 1.87, 40.83
Source of funding	Supported by grants from University Sapienza
Comments	
Data for serological recovery from IgA tTG and/or IgA EMA are presented in patients with complete and partical histological recovery respectively, meaning that it is impossible to asses serological recovery as a unique entity from histology recovery. Due to the fact that IgA tTG and/or IgA EMA was conducted on each patient and presented as a unitary ‘serology’ entity, and that this information is presented only as a proportion of those who showed histological recovery or not, the data on serological recovery in patients with CD 1 year post diagnosis is unable to be pooled with other contributing studies in this chapter.	